STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION



DIVISION SIX / DISTRICT TWO

CONTRACT PROPOSAL

WORK ORDER NUMBERS: 30001.92
ROUTES: SR 1451 (Manchester Road)

COUNTY: Cumberland

DESCRIPTION: <u>Pavement Widening, Shoulder Reconstruction, Pipe Replacement and</u>

Pavement Markings for Carvers Creek State Park on the above secondary road according to

the attached Typical Section and Special Provisions.

BID OPENING: October 16, 2013

NOTICE:

ALL BIDDERS SHALL COMPLY WITH ALL APPLICABLE LAWS REGULATING THE PRACTICE OF GENERAL CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA WHICH REQUIRES THE BIDDER TO BE LICENSED BY THE N.C. LICENSING BOARD FOR CONTRACTORS WHEN BIDDING ON ANY NON-FEDERAL AID PROJECT WHERE THE BID IS \$30,000 OR MORE, EXCEPT FOR CERTAIN SPECIALTY WORK AS DETERMINED BY THE LICENSING BOARD OR SBE PROJECT. BIDDERS SHALL ALSO COMPLY WITH ALL OTHER APPLICABLE LAWS REGULATING THE PRACTICES OF ELECTRICAL, PLUMBING, HEATING AND AIR CONDITIONING AND REFRIGERATION CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA.

NAME OF BIDDER	N.C. CONTRACTOR'S LICENSE NUMBER
ADDRESS OF BIDDER	
RETURN BIDS TO:	Mr. Tom Hay, Proposal Engineer
	Department of Transportation
	P. O. Box 1150
	Favottovillo North Carolina 28302

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INSTRUCTIONS TO BIDDERS

PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE PREPARING AND SUBMITTING YOUR BID.

All bids shall be prepared and submitted in accordance with the following requirements. Failure to comply with any requirement shall cause the bid to be considered irregular and shall be grounds for rejection of the bid.

- 1. The bid sheet furnished by NCDOT with the proposal shall be used and shall not be altered in any manner. "DO NOT SEPARATE THE BID SHEET FROM THE PROPOSAL!"
- 2. All entries on the bid sheet, including signatures, shall be written in ink.
- **3.** The Bidder shall submit a unit price for every item on the bid form. The unit prices for the various contract items shall be written in figures.
- **4.** An amount bid shall be entered on the bid sheet for every item. The amount bid for each item shall be determined by multiplying each unit bid by the quantity for that item, and shall be written in figures in the "Amount Bid" column of the sheet
- **5.** The total amount bid shall be written in figures in the proper place on the bid sheet. The total amount shall be determined by adding the amounts bid for each item.
- **6.** Changes in any entry shall be made by marking through the entry in ink and making the correct entry adjacent thereto in ink. A representative of the Bidder shall initial the change in ink.
- 7. The bid shall be properly executed. All bids shall show the following information:
 - a. Name of individual, firm, corporation, partnership, or joint venture submitting bid.
 - b. Name of individual or representative submitting bid and position or title.
 - c. Name, signature, and position or title of witness.
 - d. Federal Identification Number
 - e. Contractor's License Number
- 8 Bids submitted by corporations shall bear the seal of the corporation
- 9. The bid shall not contain any unauthorized additions, deletions, or conditional bids.
- **10.** The bidder shall not add any provision reserving the right to accept or reject an award, or to enter into a contract pursuant to an award.
- 11. THE PROPOSAL WITH THE BID SHEET STILL ATTACHED SHALL BE PLACED IN A SEALED ENVELOPE AND SHALL HAVE BEEN DELIVERED TO AND RECEIVED IN THE DIVISION PROPOSALS ENGINEER'S OFFICE AT 558 GILLESPIE STREET, FAYETTEVILLE, NORTH CAROLINA 28302 BY 10:00 AM ON WEDNESDAY, OCTOBER 16, 2013.
- **12.** The sealed bid must display the following statement on the front of the sealed envelope:
 - "Bid for roadway improvements at Carvers Creek State Park SR 1451 (026) 10/16/2013"
- 13. If delivered by mail, the sealed envelope shall be placed in another sealed envelope and the outer envelope shall be addressed as follows:

MR. TOM HAY, PROPOSALS ENGINEER NCDOT P.O. BOX 1150 FAYETTEVILLE, NORTH CAROLINA 28302

AWARD OF CONTRACT

The award of the contract, if it be awarded, will be made to the lowest responsible Bidder in accordance with Section 102 (excluding 102-2 and 102-11) of the 2012 Standard Specifications for Roads and Structures. The lowest responsible will be notified that his bid has been accepted and that he has been awarded the contract. NCDOT reserves the right to reject all bids.

DIVISION CONTRACT General Provisions

GENERAL

This contract is for pavement widening to provide right and left turn lanes on **SR 1451 (Manchester Road)** for the Carvers Creek State Park in Cumberland County. This contract proposal also includes shoulder reconstruction, driveway pipe replacement, and pavement markings. The pavement widening includes six (6) foot symmetrical widening for a left turn lane and twelve (12) foot widening for a right turn lane with all applicable pavement markings into the main entrance to the state park.

All work and materials shall be in accordance with the provisions of the General Guidelines of this contract, the Project Special Provisions, the North Carolina Department of Transportation 2012 Standard Specifications for Roads and Structures, the North Carolina Department of Transportation 2012 Roadway Standards Drawings, and the current edition of the Manual of Uniform Traffic Control Devices (MUTCD) or as directed by the Engineer.

The Contractor shall keep himself fully informed of all Federal, State and local laws, ordinances, and regulations, and shall comply with the provisions of Section 107 of the 2012 Standard Specifications.

The contractor shall coordinate all work with the Department. A pre-construction conference shall be held prior to beginning work.

PREQUALIFICATION TO BID ON POC'S

Beginning July 1, 2009, any firm that wishes to perform work on Division Purchase Order Contracts as either the prime contractor or as a subcontractor on the project must be prequalified for the type of work they wish to perform. Firms that wish to bid on these projects as the prime contractor must be prequalified prior to submitting a bid. Firms that wish to perform as a subcontractor to the prime contractor must be prequalified prior to beginning work on the project.

For the purposes of prequalification, any firm that is currently prequalified as a prime or a subcontractor on central let projects for the appropriate work codes is considered eligible to work and/or bid on Purchase Order Contracts as long as other items such as bonding and license requirements for the contract are met.

Information regarding the requirements to become prequalified as a Purchase Order Contract contractor, including the application to become prequalified if you are not already prequalified, can be found at the following website:

http://www.ncdot.org/business/howtogetstarted/

AUTHORITY OF THE ENGINEER

The Engineer for this project shall be the Division Engineer, Division Six, Division of Highways, North Carolina Department of Transportation, acting directly or through his duly authorized representatives. The Engineer will decide all questions which may arise as to the quality and acceptability of work performed and as to the rate of progress of the work; all questions which may arise as to the interpretation of the contract; and all questions as to the acceptable fulfillment of the contract on the part of the Contractor. His decision shall be final and he shall have executive authority to enforce and make effective such decisions and orders as the Contractor fails to carry out promptly. The Engineer for this project is Mr. Lee R. Hines, Jr. (Richie), PE.

BIDS

In accordance with GS 136-28.1(b), if the total bid amount of the contract exceeds **\$1,200,000**, the bid will not be considered for award. In addition, a bid tabulation will not be posted or distributed until after the project has been awarded. Also, if the project is not awarded, a bid tabulation will not be posted or distributed.

DISTRICT CONTACTS

Upon award of the contract, the District contact will be Mr. Troy L. Baker (Assistant District Engineer)

► Telephone: (910) 486-1496 ► Email: tlbaker@ncdot.gov

PROSECUTION AND PROGRESS

The Contractor shall pursue the work diligently with workmen in sufficient numbers, abilities, and supervision, and with equipment, materials, and methods of construction as may be required to complete the work described in the contract by the completion date and in accordance with Section 108 of the 2012 Standard Specifications.

The Contractor's operations are restricted to daylight hours. **No work may be performed on Sundays and/or Legal State holidays**. Work shall only be performed when weather and visibility conditions allow safe operations.

The Contractor shall temporarily remove his equipment from the travel way for emergency vehicles and school buses as directed by the Engineer.

CONTRACT TIME AND LIQUIDATED DAMAGES

(7-1-95)(Rev 12-18-07)

SP1G10

THE DATE OF AVAILABILTY FOR THIS PROJECT IS <u>THE DATE OF PURCHASE ORDER</u> ISSUANCE.

THE COMPLETION DATE FOR THIS PROJECT IS APRIL 18, 2014. THE FINAL INVOICE SHALL BE RECEIVED IN THE DISTRICT ENGINEER'S OFFICE WITHIN ONE (1) WEEK OF THE COMPLETION DATE.

No extensions will be authorized except as authorized by Article 108-10 of the 2012 Standard Specifications.

Asphalt placement operations shall not be performed on this project before March 15, 2013 or between December 15, 2013 and March 16, 2014 unless authorized by the Engineer.

The Contractor may begin work prior to this date upon approval of the Engineer or his duly authorized representative. If such approval is given, and the Contractor begins work prior to the date of availability, the Department of Transportation will assume no responsibility for any delays caused prior to the date of availability by any reason whatsoever, and such delays, if any, will not constitute a valid reason for extending the completion date. No work will be permitted and no purchase order will be issued until all required bonds and pre-requisite conditions and certifications have been satisfied. The Contractor shall request a pre-construction conference no later than 1 month after the date of availability. Contact Mr. Troy L. Baker (Assistant District Engineer) @ 910-486-1496.

Except where otherwise provided by the contract, observation periods required by the contract will not be a part of the work to be completed by the completion date and/or intermediate contract times stated in the contract. The acceptable completion of the observation periods that extend beyond the final completion date shall be a part of the work covered by the performance and payment bonds.

The liquidated damages for this contract are **Five Hundred Dollars (\$500.00)** per calendar day.

TEMPORARY SUSPENSION OF WORK

In accordance with Article 108-7 of the 2012 Standard Specifications, the Engineer will have the authority to suspend the work wholly or in part, any written order for such periods as he may deem necessary for any of the following reasons.

- 1. Conditions considered unfavorable for the suitable prosecution of the work, or
- 2. The Contractor's failure for correct conditions unsafe for workmen or the general public, or
- 3. The Contractor has not carried out orders given to him by the Engineer, or
- 4. The Contractor's failure to perform any provisions of the contract.

No extension of the completion date will be allowed for the above suspensions except as may be provided for in Article 108-10

INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES

(2-20-07) RG 14 B

The Contractor shall not narrow or close a lane of traffic on **SR 1451 (Manchester Road)** detain and /or alter the traffic flow on or during holiday weekends, special events, or any other time when traffic is unusually heavy, including the following schedules:

HOLIDAY AND HOLIDAY WEEKEND LANE CLOSURE RESTRICTIONS

- 1. For **unexpected occurrence** that creates unusually high traffic volumes, as directed by the Engineer.
- 2. For **New Year's Day**, between the hours of **4:00 p.m.** December 31st and **8:30 a.m.** January 2nd. If New Year's Day is on a Friday, Saturday, Sunday or Monday, then until **8:30 a.m.** the following Tuesday.
- 3. For Martin Luther King, Jr. Day, between the hours of 4:00 p.m. Friday and 8:30 a.m. Tuesday.
- 4. For **Easter**, between the hours of **4:00 p.m.** Thursday and **8:30 a.m.** Monday.
- 5. For **Memorial Day**, between the hours of **4:00 p.m.** Friday and **8:30 a.m.** Tuesday.
- 6. For **Independence Day**, between the hours of **4:00 p.m.** the day before Independence Day and **8:30 a.m.** the day after Independence Day.
 - If **Independence Day** is on a Friday, Saturday, Sunday or Monday, then between the hours of **4:00 p.m.** the Thursday before Independence Day and **8:30 a.m.** the Tuesday after Independence Day.
- 7. For Labor Day, between the hours of 4:00 p.m. Friday and 8:30 a.m. Tuesday.
- 8. For Veteran's Day, between the hours of 4:00 p.m. Friday and 8:30 a.m. Tuesday.
- 9. For **Thanksgiving Day**, between the hours of **4:00 p.m.** Tuesday and **8:30 a.m.** Monday.
- 10. For **Christmas**, between the hours of **4:00 p.m.** the Friday before the week of Christmas Day and **8:30 a.m.** the following Tuesday after the week of Christmas Day.

Holidays and holiday weekends shall include New Year's, Martin Luther King Jr. Day, Easter, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving, and Christmas. The Contractor shall schedule his work so that lane closures are not required during these periods, unless otherwise directed by the Engineer.

The time of availability for this intermediate contract work shall be the time the Contractor begins to install all traffic control devices for lane closures according to the time restrictions listed herein.

The completion time for this intermediate contract work shall be the time the Contractor is required to complete the removal of all traffic control devices for lane closures according to the time restrictions stated herein and place traffic in an **existing traffic** pattern.

The liquidated damages for lane closures are **Five Hundred Dollars (\$ 500.00)** per hour.

SAFETY AND ACCIDENT PROTECTION

In accordance with Article 107-22 of the 2012 Standard Specifications, the Contractor shall comply with all applicable Federal, State, and local laws, ordinances, and regulations governing safety, health, and sanitation, and shall provide all safeguards, safety devices, and protective equipment, and shall take any other needed actions, on his own responsibility that are reasonably necessary to protect the life and health of employees on the job and the safety of the public, and to protect property in connection with the performance of the work covered by the contract.

POSTED WEIGHT LIMITS

The Contractor's attention is directed to the fact that many primary and secondary roads and bridges are posted with weight limits less than the legal limit. The Contractor will not be allowed to exceed the posted weight limits in transporting materials or equipment to the project. The Contractor should make a thorough examination of all maps and haul routes on this project.

SUBLETTING OF CONTRACT

The Contractor shall not sublet, sell, transfer, assign or otherwise dispose of this contract or any portion thereof; or his right, title, or interest therein; without written consent of the Engineer. Subletting of this contract or any portion of the contract shall conform to the requirements of Article of 108-6 of the 2012 Standard Specifications.

COORDINATION WITH OTHERS

The Contractor shall coordinate with the school personnel for possible conflicts and/or delays with school activities if the project is located within five miles of the school. All work shall be scheduled to minimize interference with all school traffic.

SAFETY VESTS

All Contractors' personnel, all subcontractors and their personnel, and any material suppliers and their personnel shall wear a reflective vest or outer garment conforming to the requirements of MUTCD at all times while on the project.

CONFORMITY WITH THE CONTRACT

The presence of the engineer or an inspector at the work site shall in no way lessen the contractor's responsibility for conformity with the provisions of this contract. Should the engineer or inspector fail to point out work that does not conform with the plans and specifications, whether from lack of discovery or for any other reason, it shall in no way prevent later rejection or correction to the unsatisfactory work when discovered. The contractor shall have no claim for losses suffered due to any necessary removals or repairs resulting from unsatisfactory work.

UTILITY CONFLICTS

It shall be the responsibility of the Contractor to contact all affected utility owners and determine the precise locations of all utilities prior to beginning construction. Utility owners shall be contacted a minimum of 48 hours prior to the commencement of operations. Special care shall be used in working around or near existing utilities, protecting them when necessary to provide uninterrupted service. In the event that any utility service is interrupted, the Contractor shall notify the utility owner immediately and shall cooperate with the owner, or his representative, in the restoration of service in the shortest time possible. Existing fire hydrants shall be kept accessible to fire departments at all times.

The contractor shall adhere to all applicable regulations and follow accepted safety procedures when working in the vicinity of utilities in order to insure the safety of construction personnel and the public.

SUBSURFACE INFORMATION

(7-1-95) 450 SP1 G112 A

There is no subsurface information available on this project. The Contractor shall make his own investigation of subsurface conditions.

NOTIFICATION OF OPERATIONS

The Contractor shall notify the Engineer <u>5 calendar days</u> in advance of beginning work on this project. The Contractor shall give the Engineer sufficient notice of all operations for any sampling, inspection or acceptance testing required.

The Contractor shall request a pre-construction conference no later than 1 month after the date of availability. Contact Mr. Troy L. Baker (Assistant District Engineer) @ 910-486-1496.

MATERIAL AND EQUIPMENT STORAGE AND PARKING

When work is not in progress, keep all personnel, equipment, machinery, tools, construction debris and supplies at least 40 ft (12.2 m) away from active travel lanes. When vehicles, equipment, and materials are protected by concrete barrier or guardrail they should be offset a minimum of 5 ft (1.5 m) from the barrier or guardrail put along rear side.

RESPONSIBILITY FOR DAMAGE CLAIMS

In accordance with Article 107-15 of the 2012 Standard Specifications, the Contractor shall indemnify and save harmless the Department of Transportation and its officers, agents and employees from all suits, actions, or claims of any character brought for any injury or damages received or sustained by any person, persons or property by reason of any act of the Contractor, subcontractor, its agents or employees, in the performance of the contract. The Contractor further agrees to indemnify and save harmless the Department of Transportation and its officers, agents, and employees from any claims or amounts recovered by any of the Contractor's employees under the Worker's Compensation Act.

Pursuant to N.C.G.S. 97-19, all Contractors of the Department of Transportation are, prior to beginning services, required to show proof of coverage issued by a Worker's Compensation Insurance Carrier, or a Certificate of Compliance issued by the Department of Insurance for self-insured Subcontractors stating that it has complied with N.C.G.S. 97-93 irrespective of whether Subcontractors have regularly in service fewer than three employees in the same business within the State of North Carolina, and Subcontractors shall be hereinafter liable under the Worker's Compensation Act for payment of compensation and other benefits to its employees for any injury or death due to an accident arising out of, and in the course of performance of the work by, the Subcontractor.

VENDOR NUMBERS

ATTENTION CONTRACTORS:

Effective immediately, NCDOT will begin tracking the work of <u>all</u> subcontractors including DBE/MB/WB subcontractors. When the bids are prepared, <u>all</u> subcontractors, their vendor number and other information must be shown on the "Listing of Subcontractors" sheet found in the bid package. Most subcontractors have already been assigned a vendor number by the Raleigh office. If the subcontractor does not have an NCDOT vendor number, he/she must complete a W-9 form and may submit it to:

North Carolina Department of Transportation, Division 6 – District 2, Post Office Box 1150, Fayetteville, NC 28302.

Each time an invoice for payment is submitted to NCDOT, the prime contractor is required to submit a list of all subcontractors along with their vendor numbers that received payment the previous month from the prime contractor on the project. Also shown shall be the items of work they did and the amount paid to them the previous month and whether they were DBE/MB/WB. This list must be submitted along with the invoice in order for payment to be processed into the NCDOT accounting system. THE INVOICE CAN NOT BE PROCESSED NOR PAYMENT BE MADE UNTIL THIS INFORMATION IS SUBMITTED.

TRAFFIC CONTROL AND WORK ZONE SAFETY

The Contractor shall maintain traffic during construction and provide, install, and maintain all traffic control devices in accordance with these project guidelines, the Project Special Provisions, Division 11 of the North Carolina Department of Transportation 2012 Standard Specifications for Roads and Structures, and the current edition of the Manual of Uniform Traffic Control Devices (MUTCD).

The Contractor shall utilize complete and proper traffic controls and traffic control devices during all operations. All traffic control and traffic control devices required for any operation shall be functional and in place prior to the commencement of that operation. Signs for temporary operations shall be removed during periods of inactivity. The Contractor is required to leave the project in a manner that will be safe to the traveling public and which will not impede motorists.

Traffic movements through lane closures on roads with two way traffic shall be controlled by flaggers stationed at each end of the work zone. In situations where sight distance is limited, the Contractor shall provide additional means of controlling traffic, including, but not limited to, two-way radios, pilot vehicles, or additional flaggers. Flaggers shall be competent personnel, adequately trained in flagging procedures, and furnished with proper safety devices and equipment, including, but not limited to, safety vests and stop/slow paddles.

All personnel when working in traffic areas or areas in close proximity to traffic shall wear an approved safety vest, or shirt or jacket which meets the color requirements of the <u>Manual of Uniform Traffic Control Devices</u> (MUTCD).

The Contractor shall comply with all applicable Federal, State, and local laws, ordinances, and regulations governing safety, health, and sanitation, and shall provide all safeguards, safety devices, and protective equipment, and shall take any other needed actions, on his own responsibility that are reasonably necessary to protect the life and health of employees on the job and the safety of the public, and to protect property in connection with the performance of the work covered by the contract.

Failure to comply with any of the requirements for safety and traffic control of this contract shall result in suspension of work as provided in subarticle 108-7(2) of the 2012 Standard Specifications.

All contractor personnel will be required to wear a Class II ANSI approved safety vest while working within the NCDOT Right of Way.

No direct payment shall be made for Traffic Control and Work Zone Safety items, as they shall be considered incidental to other contract items.

FLAGGERS

Furnish, relocate and maintain the flaggers, hats, vests, STOP/SLOW paddles and any other incidentals necessary to control traffic.

Refer to Roadway Standard Drawing No. 1150.01.

Provide the service of properly equipped and qualified flaggers (see Roadway Standard Drawing No. 1150.01) at locations and times for such period as necessary for the control and protection of vehicular and pedestrian traffic. Anyone who controls traffic is required to be qualified. Qualification consists of each flagger receiving proper training in the set-up and techniques of safely and competently performing a flagging operation. Qualification of flaggers is to be done by an NCDOT approved training agency or other approved training provider. For a complete listing of these, see the Work Zone Traffic Control's webpage. Prior to beginning work on the project, a Qualification Statement that all flaggers used on the project have been properly trained through an NCDOT approved training resource shall be provided to the Engineer.

Use flagging methods that comply with the guidelines in the MUTCD.

There shall be no direct payment for Flaggers as the use of Flaggers shall be considered incidental to the contractor's operations.

SUPERVISION BY CONTRACTOR

At all times during the life of the project the Contractor shall provide one permanent employee who shall have the authority and capability for overall responsibility of the project and who shall be personally available at the work site within 24 hours notice. Such employee shall be fully authorized to conduct all business with the subcontractors, to negotiate and execute all supplemental agreements, and to execute the orders or directions of the Engineer.

At all times that work is actually being performed, the Contractor shall have present on the project one competent individual who is authorized to act in a supervisory capacity over all work on the project, including work subcontracted. The individual who has been so authorized shall be experienced in the type of work being performed and shall be fully capable of managing, directing, and coordinating the work; of reading and thoroughly understanding the contract; and receiving and carrying out directions from the Engineer or his authorized representatives. He shall be an employee of the Contractor unless otherwise approved by the Engineer.

The Contractor may, at his option, designate one employee to meet the requirements of both positions. However, whenever the designated employee is absent from the work site, an authorized individual qualified to act in a supervisory capacity on the project shall be present.

LIABILITY INSURANCE

(11-18-08) SP1G80

The Contractor shall be liable for any losses resulting from a breach of the terms of this contract. The Contractor shall be liable for any losses due to the negligence or willful misconduct of its agents, assigns and employees including any sub-contractors which causes damage to others for which the Department is found liable under the Torts Claims Act, or in the General Courts of Justice, provided the Department provides prompt notice to the Contractor and that the Contractor has an opportunity to defend against such claims. The Contractor shall not be responsible for punitive damages.

The Contractor shall at its sole cost and expense obtain and furnish to the Department an original standard ACORD form certificate of insurance evidencing commercial general liability with a limit for bodily injury and property damage in the amount of \$5,000,000.00 per occurrence and general aggregate, covering the Contractor from claims or damages for bodily injury, personal injury, or for property damages which may arise from operating under the contract by the employees and agents of the Contractor. The required limit of insurance may be obtained by a single general liability policy or the combination of a general liability and excess liability or umbrella policy. The State of North Carolina shall be named as an additional insured on this commercial general liability policy. The policy may contain the following language as relates to the State as an additional insured: "This insurance with respect to the additional insured applies only to the extent that the additional insured is held liable for your or your agent's acts or omissions arising out of and in the course of operations performed for the additional insured."

The Contractor shall maintain all legally required insurance coverage, including without limitation, worker's compensation and vehicle liability, in the amounts required by law. Providing and maintaining adequate insurance coverage is a material obligation of the contractor and is of the essence of this contract. All such insurance shall meet all laws of the State of North Carolina. Such insurance coverage shall be obtained from companies that are authorized to provide such coverage and that are authorized by the Commissioner of Insurance to do business in North Carolina. The Contractor shall at all times comply with the terms of such insurance policies.

Upon execution of the contract, provide evidence of the above insurance requirements to the Engineer.

CONTRACT PAYMENT AND PERFORMANCE BOND

A performance bond in the amount of one hundred percent (100%) of the contract amount, conditioned upon the faithful performance of the contract in accordance with specifications and conditions of the contract is required for Construction contracts of \$500,000 or more. Such bond shall be solely for the protection of the North Carolina Department of Transportation and the State of North Carolina.

A payment bond in the amount of one hundred percent (100%) of the contract amount, conditioned upon the prompt payment for all labor or materials for which the Contractor, or his subcontractors, is liable is required for Construction contracts greater than \$500,000. The payment bond shall be solely for the protection of persons or firms furnishing materials or performing labor for this contract for which the Contractor is liable.

The successful bidder, within fourteen (14) days after notice of award, shall provide the Department with a contract payment bond and a contract performance bond each in an amount equal to 100 percent of the amount of the contract.

RETAINAGE AND PROMPT PAYMENT

<u>Prompt Payment of Monies Due to Subcontractors, Second Tier Subcontractors and Material Suppliers and Release of Retainage</u>

Contractors at all levels; prime, subcontractor, or second tier contractor, shall within seven calendar days of receipt of monies, resulting from work performed on the project or services rendered, pay subcontractors, second tier subcontractors, or material suppliers, as appropriate. This seven-day period begins upon knowledgeable receipt by the contracting firm obligated to make a subsequent periodic or final payment. These prompt payment requirements will be met if each firm mails the payment to the next level firm by evidence of postmark within the seven-day period.

This provision for prompt payment shall be incorporated into each subcontract or second tier subcontract issued for work performed on the project or for services provided.

The Contractor may withhold up to 3% retainage if any subcontractor does not obtain a payment and performance bond for their portion of the work. If any retainage is held on subcontractors, all retainage shall be released within seven calendar days of satisfactory completion of all work. For the purpose of release of retainage, satisfactory completion is defined as completion of all physical elements and corresponding documentation as defined in the contract, as well as agreement between the parties as to the final quantities for all work performed in the subcontract. The Department will provide internal controls to expedite the determination and processing of the final quantities for the satisfactorily completed subcontract portions of the project.

Failure of any entity to make prompt payment as defined herein may result in (1) withholding of money due to that entity in the next partial payment until such assurances are made satisfactory to this provision; or (2) removal of an approved contractor from the prequalified bidders list or the removal of other entities from the approved subcontractors list.

The Contractor shall submit a completed DBE-1S form with every invoice.

PARTIAL PAYMENT

The Contractor may submit a request for partial payment on a monthly basis, or other interval as approved by the Engineer. Compensation for all pay items shall be in accordance with the 2012 Standard Specifications. The amount of partial payments will be based on the work accomplished and accepted as the last day of the approved pay period. All requests for payment shall be made on the form furnished to the Contractor by the Department of Transportation. The form shall be completely and legibly filled out with all appropriate information supplied and shall be signed by an authorized representative of the Contractor. Minority Business (MB) and Women's Business (WB) participation shall be listed in the appropriate spaces on all requests for payment. If there is no participation the word "None" or the figure "0" shall be entered. An amount equal to five percent (5%) of the total amount due on the partial pay estimate will be deducted and retained until after the final inspection. One hundred percent (100%) payment shall be made after successful completion of the work as verified by the final inspection.

The Contractor shall submit a completed DBE-1S form with every invoice. Invoices shall not be processed until the completed DBE-IS form has been received by the District Engineer or his/her representative.

CLAIMS FOR ADDITIONAL COMPENSATION OR EXTENSION OF TIME

Any claims for additional compensation and/or extensions of the completion date shall be submitted to the Division Engineer with detailed justification within thirty (30) days after receipt of the final invoice payment. The failure of the Contractor to submit the claim(s) within thirty days shall be a bar to recovery.

INVOICES FOR PAYMENT

The Contractor shall submit an invoice to the District Engineer for approval for payment. For any discrepancies noted on the invoice, the Contractor will be notified to submit a corrected copy before payment can be made (No errors or strike-thrus are permitted).

Scheduled estimate times will be determined by the District Engineer during the pre-construction conference. No invoices shall be accepted for payment at any time other than those scheduled, unless directed by the Engineer. For final invoice payment, a separate invoice will be submitted for any retainage due.

THE FINAL INVOICE SHALL BE RECEIVED IN THE DISTRICT ENGINEER'S OFFICE WITHIN ONE (1) WEEK OF THE COMPLETION DATE.

Invoices shall be submitted to:

Mr. Troy L. Baker NCDOT – Division of Highways PO Box 1150 Favetteville, NC 28306

OUTSOURCING OUTSIDE THE USA

(9-21-04) (5-16-06) SP1G150

All work on consultant contracts, services contracts, and construction contracts shall be performed in the United States of America. No work shall be outsourced outside of the United States of America.

Outsourcing for the purpose of this provision is defined as the practice of subcontracting labor, work, services, staffing, or personnel to entities located outside of the United States.

The North Carolina Secretary of Transportation shall approve exceptions to this provision in writing.

MAINTENANCE OF THE PROJECT

The Contractor shall maintain the project from the date of availability or the date of beginning work, whichever occurs first, until the project is finally accepted. On resurfacing projects the Contractor shall maintain each part of the project, as defined by map numbers, from the date of beginning work on that part until such part is finally accepted. This maintenance shall be continuous and effective and shall be prosecuted with adequate equipment and forces to the end that all work covered by the contract is kept in satisfactory and acceptable condition at all times.

The Contractor shall maintain all existing drainage facilities, except where the work consists of resurfacing only, such that they are in the same condition upon acceptance of the project as they were when the project was made available to the Contractor.

In the event that the Contractor's work is suspended for any reason, the Contractor shall maintain the work covered by the contract, as provided herein.

When a portion of the project is accepted as provided in Article 105-17, immediately after such acceptance the Contractor will not be required to maintain the accepted portions. Should latent defects be discovered or become evident in an accepted portion of the project, such defective work shall be repaired or replaced at no cost to the Department.

Where an observation period is required that extends beyond the final acceptance date, the Contractor shall perform any work required by the observation period until satisfactory completion of the observation period. The Contractor will not be directly compensated for any maintenance operations necessary, as this work will be incidental to the work covered by the various contract items.

MATERIALS AND TESTING

The Engineer reserves the right to perform all sampling and testing in accordance with Section 106 of the 2012 Standard Specifications and the Department's "Materials and Test Manual." However the Engineer may reduce the frequency of sampling and testing where he deems it appropriate for the project.

The Contractor shall furnish the applicable certifications and documentation for all materials as required by the 2012 Standard Specifications. Material, which is not properly certified, will not be accepted.

INSPECTION

All work shall be subject to inspection by the Engineer at any time. Routinely, the Engineer will make periodic inspections of the completed work. It will be the responsibility of the Contractor to keep the Engineer informed of his proposed work plan and to submit written reports of work accomplished on a frequency to be determined by the Engineer.

ENGINEERING CONTROL

Engineering control and inspection will be by the North Carolina Department of Transportation. The Contractor will cut test samples as directed by the Engineer. The North Carolina Department of Transportation will set all necessary grades for pipe, ditches, or masonry drainage structures. All other field engineering will be the responsibility of the Contractor and considered as incidental to the project bid.

DEBARMENT STATEMENT

The Contractor certifies and understands that by his/her signature on the Bid Form that he/she and the contracting firm he/she represents has not been banned, debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency.

GIFTS FROM VENDORS AND CONTRACTORS

(12-15-09) SP1 G152

By Executive Order 24, issued by Governor Perdue, and *N.C. G.S.§* 133-32, it is unlawful for any vendor or contractor (i.e. architect, bidder, contractor, construction manager, design professional, engineer, landlord, offeror, seller, subcontractor, supplier, or vendor), to make gifts or to give favors to any State employee of the Governor's Cabinet Agencies (i.e. Administration, Commerce, Correction, Crime Control and Public Safety, Cultural Resources, Environment and Natural Resources, Health and Human Services, Juvenile Justice and Delinquency Prevention, Revenue, Transportation, and the Office of the Governor). This prohibition covers those vendors and contractors who:

- (1) have a contract with a governmental agency; or
- (2) have performed under such a contract within the past year; or
- (3) anticipate bidding on such a contract in the future.

For additional information regarding the specific requirements and exemptions, vendors and contractors are encouraged to review Executive Order 24 and G.S. § 133-32.

Executive Order 24 also encouraged and invited other State Agencies to implement the requirements and prohibitions of the Executive Order to their agencies. Vendors and contractors should contact other State Agencies to determine if those agencies have adopted Executive Order 24.

INDEMNIFICATION

The Contractor shall defend, indemnify and hold harmless the North Carolina Department of Transportation, its officers and employees from any claim, demand, suit, liability, judgement and expense (including attorney's fees and other costs of litigation) arising out of or relating to injury, disease, or death of persons or damage to or loss of property resulting from or in connection with the negligent performance of this contract by the Contractor, its agents, employees, and subcontractors or any one for whom the Contractor may be responsible. The obligations, indemnities and liabilities assumed by the Contractor under this paragraph shall not extend to any liability caused by the negligence of the Department of Transportation or its employees. The Contractor's liability shall not be limited by any provisions or limits of insurance set forth in this contract.

The Contractor shall indemnify and hold harmless the Department of Transportation from any claim, demand, suit, liability, judgement, and expense involving damage or loss to the Contractor's equipment (including vandalism, theft, fire, and acts of God) arising out of or relating to work performed under this agreement. The obligations, indemnities and liabilities assumed by the Contractor under this paragraph shall not extend to any liability caused by the negligence of the Department of Transportation or its employees. The Contractor's liability shall not be limited by any provisions or limits of insurance set forth in this contract.

The Contractor further agrees to indemnify the Department of Transportation for any damages to the roadway, highway signs, highway equipment and other property owned or in possession of the Department of Transportation, brought about by reason of the negligent operation of the equipment. The Contractor further agrees to indemnify and save harmless the Department of Transportation, its officers and employees from any claims or amounts recovered by any of the Contractor's employees under the Workmen's Compensation Act.

CONTACTOR CLAIM SUBMITTAL FORM

(9-16-08) SP1G140

If the Contractor elects to file a written claim or requests an extension of contract time, it shall be submitted on the *Contractor Claim Submittal Form (CCSF)* available through the Construction Unit or http://ncdot.org/doh/operations/dp_chief_eng/constructionunit/formsmanuals/.

AVAILABILITY OF FUNDS – TERMINATION OF CONTRACTS

5-20-08)

Z-2

General Statute 143C-6-11. (h) Highway Appropriation is hereby incorporated verbatim in this contract as follows:

(h) Amounts Encumbered. – Transportation project appropriations may be encumbered in the amount of allotments made to the Department of Transportation by the Director for the estimated payments for transportation project contract work to be performed in the appropriation fiscal year. The allotments shall be multiyear allotments and shall be based on estimated revenues and shall be subject to the maximum contract authority contained in *General Statute 143C-6-11(c)*. Payment for transportation project work performed pursuant to contract in any fiscal year other than the current fiscal year is subject to appropriations by the General Assembly. Transportation project contracts shall contain a schedule of estimated completion progress, and any acceleration of this progress shall be subject to the approval of the Department of Transportation project contract, and any transportation project contract shall be so terminated or suspended if funds will not be available for payment of the work to be performed during that fiscal year pursuant to the contract. In the event of termination of any contract, the contractor shall be given a written notice of termination at least 60 days before completion of scheduled work for which funds are available. In the event of termination, the contractor shall be paid for the work already performed in accordance with the contract specifications.

Payment will be made on any contract terminated pursuant to the special provision in accordance with Article 108-13(E), of the *North Carolina Department of Transportation 2012 Standard Specifications for Roads and Structures*, dated July 1, 2012.

DEFAULT OF CONTRACT

The Department of Transportation shall have the right to declare default of contract for breach by the Contractor of any material term or condition of the contract. Default of contract shall be in accordance with the terms, conditions, and procedures of Article 108-9 of the 2012 Standard Specifications.

TWELVE MONTH GUARANTEE

(7-15-03) 108 SP1 G145

- (A) The Contractor shall guarantee materials and workmanship against latent and patent defects arising from faulty materials, faulty workmanship or negligence for a period of twelve months following the date of final acceptance of the work for maintenance and shall replace such defective materials and workmanship without cost to the Department. The Contractor will not be responsible for damage due to faulty design, normal wear and tear, for negligence on the part of the Department, and/or for use in excess of the design.
- (B) Where items of equipment or material carry a manufacturer's guarantee for any period in excess of twelve months, then the manufacturer's guarantee shall apply for that particular piece of equipment or material. The Department's first remedy shall be through the manufacturer although the Contractor is responsible for invoking the warranted repair work with the manufacturer. The Contractor's responsibility shall be limited to the term of the manufacturer's guarantee. NCDOT would be afforded the same warranty as provided by the Manufacturer.

This guarantee provision shall be invoked only for major components of work in which the Contractor would be wholly responsible for under the terms of the contract. Examples would include pavement structures, bridge components, and sign structures. This provision will not be used as a mechanism to force the Contractor to return to the project to make repairs or perform additional work that the Department would normally compensate the Contractor for. In addition, routine maintenance activities (i.e. mowing grass, debris removal, ruts in earth shoulders,) are not parts of this guarantee.

Appropriate provisions of the payment and/or performance bonds shall cover this guarantee for the project.

To ensure uniform application statewide the Division Engineer will forward details regarding the circumstances surrounding any proposed guarantee repairs to the Chief Engineer for review and approval prior to the work being performed.

EMPLOYMENT

(11-15-11) (Rev. 1-17-12) 108, 102 SP1 G184

Revise the 2012 Standard Specifications as follows:

Page 1-20, Subarticle 102-15(O), delete and replace with the following:

(O) Failure to restrict a former Department employee as prohibited by Article 108-5.

Page 1-65, Article 108-5 Character of Workmen, Methods, and Equipment, line 32, delete all of line 32, the first sentence of the second paragraph and the first word of the second sentence of the second paragraph.

DIVISION CONTRACTProject Special Provisions

NOTIFICATION OF OPERATIONS

The Contractor shall notify the Engineer <u>one week</u> in advance of beginning work on this project. The Contractor shall give the Engineer sufficient notice of all operations for any sampling, inspection or acceptance testing required.

INTERPRETATION OF QUANTITIES IN PROPOSAL FORM

The quantities appearing in the proposal form are approximate only and are to be used for the comparison of bids. Payment to the Contractor will be made only for the actual quantities of the various items that are completed and accepted in accordance with the terms of the contract.

DRIVEWAYS AND PRIVATE PROPERTY

The Contractor shall maintain access to driveways for all residents and property owners throughout the life of the project. The Contractor shall not perform work for private citizens or agencies in conjunction with this project or within the project limits of this contract. Any driveway paved by a Contractor which ties into a NCDOT system road being paved by the Contractor must be paved either prior to the road paving project or after its completion. Any driveway cut or damaged by the contractor shall be repaired. Driveway construction will include the removal, disposal and regrading of the driveways for a distance necessary as directed by the Engineer. Concrete or asphalt driveway removal will require a saw cut. There shall be no direct payment for driveway construction.

TRAFFIC SIGNS & MAILBOXES

Permanent traffic signs and mailboxes that interfere with the road construction operations are to be removed during the course of a day's work, and be reinstalled at the conclusion of each work day. The Contractor shall mark the proper location of the signs and mailboxes by placing an offset stake behind the ditch line to ensure proper replacement.

EQUIPMENT

The Contractor shall furnish all equipment in good operating condition and operated by properly trained and qualified personnel. The Contractor shall be responsible for all costs or charges incurred in the operation and maintenance of the equipment during the performance of this contract. Upon request, the contractor shall provide any and all state and federal certifications for equipment safety.

Payment for equipment and labor required to perform bid items is included in the bid item price provided by the contractor. Mobilization of labor and equipment shall be included in the bid item price provided by the contractor.

MOBILIZATION

This work consists of preparatory work and operations, including but not limited to the movement of personnel, equipment, supplies, and incidentals to the project site, for the establishment of offices, buildings, and other facilities necessary for work on the project; the removal and disbandment of those personnel, equipment, supplies, incidentals, or other facilities that were established for the prosecution of work on the project; and for all other work and operations which must be performed for costs incurred prior to beginning work on the various items on the project site.

Basis of payment: Mobilization will be lump sum.

UNDERCUT EXCAVATION

When the Engineer determines that the finish graded roadway cross section contains undesirable material, the Contractor shall remove the material and backfill with suitable, properly compacted material. Payment for undercut excavation will be made only in areas that have been examined and approved by the Engineer. Work shall be done in accordance with Section 225 of the 2012 Standard Specifications.

Excavation will be measured and paid in cubic yards of materials, measured in their original position and computed by the average end method. The Contractor shall not exceed a depth of three (3) feet when excavating unsuitable material. Foundation Conditioning Geotextile (Geotextile for Drainage, Type 2) shall be utilized in these areas or as directed by the Engineer. All excess material shall be disposed of in accordance with Section 802 of the 2012 Standard Specifications.

Payment to the contractor will be full compensation for all work involving undercut excavation and hauling and disposing of materials.

Basis of payment:

Undercut Excavation, per cubic yard (contingent item), Geotextiles for Drainage, Type 2, per square yard (contingent item).

COMPREHENSIVE GRADING

The Contractor is to grade this project to the typical sections, details, and plans provided.

Grading shall be comprehensive grading as defined in Section 226 of the 2012 Standard Specifications, as amended herein, and shall include all grading work necessary to construct the project including but not limited to clearing and grubbing (right of ways and sight distances), roadway excavation (channeling), fine grading, and shaping, grading and compacting roadway ditches, tail ditches, slopes and subgrade.

Shoulder Construction shall be paid for as Shoulder Borrow and is included elsewhere in this contract proposal.

Driveway construction will include the removal, disposal and regrading of the driveways for a distance necessary as directed by the Engineer and will be considered incidental to the Comprehensive Grading item.

It will be the Contractor's responsibility to dispose of any waste material. Borrow excavation (shoulder borrow) will be covered under a separate item. However, all suitable excess material shall be stockpiled and used for shoulder material. **No material may be wasted or removed from the project unless approved by the Engineer.** Any material removed from the project shall be done in accordance with Section 802 of the 2012 Standard Specifications. **All waste/debris removed from the project shall be disposed of at the approved waste site.**

All waste shall be disposed of at a site that has an Environmental Assessment approved by the Division Environmental Officer. Work shall not begin on this project until such time as the source of waste and borrow along with the submission of all applicable permits have been identified and approved by the Engineer and the Division Environmental Officer. For additional information in regards to the requirement of the Environmental Assessment, contact the Division Six Environmental Officer @ (910) 437-0207.

The Contractor shall shape, compact and grade the slopes, ditches, subgrade and shoulders to the lines, grades and typical sections established by the plans or as directed by the Engineer. Roadway ditches shall be cleaned, reshaped and maintained until final acceptance of the project. Drainage adequate for the protection of the subgrade shall be provided at all times. Previously approved subgrade that is damaged by natural causes, construction equipment, hauling equipment or traffic shall be restored to the required lines, grades, typical sections and densities at no expense to the Department of Transportation.

COMPREHENSIVE GRADING (continued)

Excavated areas shall be uniformly graded, well compacted and free of debris and loose material. Excavated areas adjacent to existing pavement having more than a 2 inch drop from the edge of pavement shall not be left open overnight. Such areas shall be made safe by the placement of solid material at a 6:1 or flatter slope. All open areas shall be identified and guarded by adequate traffic control devices as directed and approved by the Manual of Uniform Traffic Control Devices (MUTCD), North Carolina Department of Transportation 2012 Roadway Standard Drawings, and the Engineer.

The Contractor shall remove and satisfactorily dispose of vegetation and debris from within the project limits. All waste shall be disposed in accordance with state, federal and local regulations regarding the disposal of waste material and Section 802 of the 2012 Standard Specifications. All permits and fees for any such disposal shall be the responsibility of the Contractor. NCDOT shall not be held liable for disposal of any materials outside the project right of way.

Basis of payment:

Comprehensive Grading will be lump sum.

REMOVAL OF EXISTING ASPHALT PAVEMENT

Break up, remove and satisfactorily dispose of the Portland cement concrete or asphalt components of an existing drainage structures, including concrete paved ditches, concrete paved aprons and other drainage structure components within the limits shown in the plans or as directed by the Engineer. Work shall be done in accordance with Section 250 of the <u>Standard Specifications</u>.

Break up and remove the pavement for its entire depth. Where concrete or asphalt pavement is to be removed, provide a neat edge along the pavement being retained by sawing the pavement approximately 2" deep before breaking the adjacent pavement away. Properly dispose of all materials resulting from the pavement removal as provided herein.

Dispose of all materials that cannot be used in the work in accordance with Section 802 of the Standard Specifications.

There shall be no direct payment for Breaking of Existing Asphalt Pavement or Breaking of Existing Concrete Pavement Slabs, as this will be considered incidental to the removal of existing asphalt pavements or existing concrete pavement slabs.

Payment to the contractor will be full compensation for all work involving the removal of existing asphalt or concrete and hauling and disposing of materials.

Basis of payment:

Removal of Existing Asphalt Pavement, per square yard.

WASTE AND BORROW SOURCES

Payment for temporary erosion control measures, except those made necessary by the Contractor's own negligence or for his own convenience, will be paid for at the appropriate contract unit price for the devices or measures utilized on the project. No additional payment will be made for erosion control devices or permanent seeding and mulching in any commercial borrow or waste pit. All erosion and sediment control practices that may be required on a commercial borrow or waste site will be done at the Contractor's expense. All waste/debris including but not limited to spoil material, vegetation, concrete, asphalt, and culverts shall not be removed from the project until all waste sites have identified and approved by the Engineer and the Division Environmental Officer. All waste/debris removed from the project shall be disposed of at the approved waste site.

All waste shall be disposed of at a site that has an Environmental Assessment approved by the Division Environmental Officer. Work shall not begin on this project until such time as the source of waste and borrow along with the submission of all applicable permits have been identified and approved by the Engineer and the Division Environmental Officer. For additional information in regards to the requirement of the Environmental Assessment, contact the Division Six Environmental Officer @ (910) 437-0207.

SELECT MATERIAL

Furnish and place select material in accordance with the contract or as directed by the Engineer. Select material is suitable material classified by gradation and performance characteristics as shown in Section 1016 of the 2012 Standard Specifications. Use select material called for on the contract for backfill in undercut and pipe backfill in locations specified by the Engineer and in accordance with Section 300-7 of the 2012 Standard Specifications. With written approval and without additional compensation, a higher class of material may be substituted than stated in the contract. Use Class II or III Select Material. Refer to Division 10 of the 2012 Standard Specifications.

Item	Section
Select Material, Class II	1016
Select Material, Class III	1016

There shall be no direct payment for Select Material as the placement of the Select Material shall be considered incidental to the installation the Pipe Culverts.

SELECT GRANULAR MATERIAL

(3-16-10) (Rev. 1-17-12) 265 SP2 R80

Revise the 2012 Standard Specifications as follows:

Page 2-28, Article 265-2 MATERIALS, add the following:

Use only Class III select material for select granular material.

Page 2-28, Article 265-4 MEASUREMENT AND PAYMENT, lines 13-30, replace all occurrences of Select Granular Material with Select Granular Material, Class III.

SELECT MATERIAL, CLASS III, TYPE 3

(1-17-12) 1016, 1044 SP10 R05

Revise the 2012 Standard Specifications as follows:

Page 10-39, Article 1016-3, CLASS III, add the following after line 14:

Type 3 Select Material

Type 3 select material is a natural or manufactured fine aggregate material meeting the following gradation requirements and as described in Sections 1005 and 1006:

	Percentage of Total by Weight Passing							
,	3/8	#4	#8	#16	#30	#50	#10 0	#20 0
,	100	95- 100	65- 100	35- 95	15- 75	5- 35	0-25	0-8

Page 10-39, Article 1016-3, CLASS III, line 15, replace "either type" with "Type 1, Type 2 or Type 3".

Page 10-62, Article 1044-1, line 36, delete the sentence and replace with the following:

Subdrain fine aggregate shall meet Class III select material, Type 1 or Type 3.

Page 10-63, Article 1044-2, line 2, delete the sentence and replace with the following:

Subdrain coarse aggregate shall meet Class V select material.

PIPE CULVERTS

The Contractor shall furnish and install pipe culverts in accordance with the requirements of Division 3 of the 2012 Standard Specifications, standard drawing number 300.01 of the 2012 Roadway Standards Drawings, and amendments thereof and as directed by the Engineer. The work includes construction of joints and connections to other pipes, endwalls, and drainage structures.

All cross pipes shall be constructed with minimum cover as defined the 2012 Standard Specifications, Standard Drawing numbers 300.01 of the Roadway Standards Drawings, the Roadway Design Manual, and amendments thereof and as directed by the Engineer. All pipe materials shall be inspected and approved by the Engineer after delivery to the project and prior to installation.

The Contractor shall thoroughly and carefully backfill the pipe in layers not exceeding 6 inches loose with material approved by the Engineer. Pipe and backfilled areas shall be graded and maintained in such a condition that erosion or saturation will not erode or damage the pipe or backfill. Compact to the density required by Subarticle 235-3(C). Approval of the backfill material is required before its use. Use select material as shown in the contract documents. Heavy equipment shall not be operated over the pipe until it has been properly backfilled and minimum cover as shown on the plans or as approved by the Engineer has been placed over the pipe. Pipe culverts shall not be backfilled until approved by the Engineer or his representative.

Do not waste excavation unless permitted. Use suitable excavated material as backfill; or in the formation of embankments, subgrades, and shoulders; or as otherwise directed. Furnish disposal areas for the unsuitable material. The Engineer will identify excavated materials that are unsuitable. Provide bedding material in accordance with Article 1016-3 for Class II (Type 1 only) or Class III select material as shown in contract. No measurement will be made for select bedding and select backfill material required in the contract documents. The select bedding and backfill material will be included in the cost of the installed pipe.

Where traffic is to be maintained, install pipe in sections so that half the width of the roadway is available to traffic.

Where material is found to be of poor supporting value or of rock and when the Engineer cannot make adjustment in the location of the pipe, undercut existing foundation material within the limits established on the plans. Backfill the undercut with select bedding and backfill material or foundation conditioning material as conditions permit. Where foundation conditioning geotextiles are required for soil stabilization, use Geotextiles for Drainage, Type 2 or as directed by the Engineer.

If proposed invert elevations are adjusted and/or the actual location of a pipe culvert is changed from the location on the plans during construction based upon actual conditions encountered, no claim for an extension of time for any reason resulting from this information will be allowed.

Pipe will be measured and paid as the actual number of linear feet of pipe that has been incorporated into the completed and accepted work. Measurement of pipe will be made by counting the number of joints used and multiplying by the length of the joint to obtain the number of linear feet of pipe installed and accepted. Measurements of partial joints will be made along the longest length of the partial joint to the nearest 0.1 foot.

Basis of payment:

18" RC Pipé Culverts, Class III, per linear foot,

Geotextiles for Drainage, Type 2, per square yard (contingent item).

PIPE REMOVAL

All pipe removal will be considered waste material, and will be the responsibility of the Contractor to remove to the waste site. Payment will be per unit price and include removal to the waste site. Removal of drainage structures such as head walls will be considered incidental to the pipe removal. Pipe Removal shall be done in accordance with Section 340 of the 2012 Standard Specifications.

Contract unit price bid shall include removal to, and disposal at, a Contractor provided waste site.

Basis of payment:

Pipe Removal, per linear foot.

SHOULDER/SLOPE CONSTRUCTION (SHOULDER BORROW)

Perform the required shoulder and slope construction for this project in accordance with the applicable requirements of Section 560 and Section 235 of the 2012 Standard Specifications.

Perform the work covered by this section including but not limited to furnishing the source of the borrow; building; maintaining, and obliterating haul roads; clearing and grubbing the borrow source; removal, hauling, and disposition of overburden and other unsuitable material; excavation; hauling; formation of roadway shoulders include there shaping and finishing of slopes adjacent to the shoulders and roadway ditches; restoration of the source and haul roads to an acceptable condition; disposal of surplus stockpiled material.

Use soil consisting of loose, friable, sandy material free of subsoil admixtures, refuse, stumps, rocks, roots, root mats, or other unsatisfactory material. Remove stones and other foreign material 2" or larger in diameter. All soil is subject to testing and acceptance or rejection by the Engineer. Use Engineer approved material in the construction of earth shoulders, which has been obtained from unclassified excavation, fine grading operations, or from borrow sources as provided in Section 230.

Construct the top 6 in. of shoulders with soils capable of supporting vegetation. Construct the shoulders in proper sequence with the type of base and pavement being constructed. Perform the work in such a manner as to provide proper drainage at all times. Shape and roll the shoulder material during placement in such a manner as will provide for satisfactory bonding of layers and compacted to a degree satisfactory to the Engineer. **Prior to placing any earth material on existing graded shoulders, remove all existing vegetation and scarify the existing shoulders to ensure a proper bond.** Perform the final shaping of the shoulders, adjacent slopes, and ditches in accordance with the typical section shown on the plans. Provide adequate equipment to perform the work. Exercise care not to damage base, surface, pavement, or drainage features during the construction of the shoulders. Should damage occur because of the Contractor's operations, repair the damaged portions or remove and replace them as directed at no cost to the Department.

Shoulder borrow will be measured in the haul truck, as directed by the Engineer. No measurement will be made of material transported directly from unclassified excavation or fine grading and deposited directly in the place on the shoulder. The quantity of shoulder borrow will be paid for at the contract unit price per cubic yard for "Shoulder Borrow", except as otherwise provided below.

The quantity of shoulder borrow to be paid for will be the actual number of cubic yards of approved material, measured in trucks, which has been incorporated into the completed and accepted work. Each truck will be measured by the Engineer and shall bear a legible identification mark indicating its capacity. Load each truck to at least its measured capacity at the time it arrives at the point of delivery. The recorded capacity will be adjusted by making a 25 percent deduction to allow for shrinkage, and the adjusted capacity will be the quantity to be paid for. When shoulder material is obtained as a result of fine grading operations, trenching out existing subgrade, and/or shaping slopes and ditches, no direct payment will be made for the work of shoulder construction as such work will be considered incidental to the work of constructing the base or pavement. No payment will be made for the removal and disposal of any surplus material remaining in the stockpile after the shoulders have been completed. Where the borrow source has been furnished by the Department, payment for clearing and grubbing the source will be made as provided in Article 200-7 and payment for draining the source will be made as provided in Article 240-4. Where the source has been furnished by the Contractor, no separate payment will be made for clearing and grubbing, draining and seeding and mulching the source as such work will be considered as incidental to the work covered by this section.

The Contractor shall remove and satisfactorily dispose of vegetation and debris from within the project limits. All waste disposal shall be in accordance with state, federal and local regulations and Section 802 of the 2012 Standard Specifications regarding the disposal of waste material. All permits and fees for any such disposal shall be the responsibility of the Contractor. NCDOT shall not be held liable for disposal of any materials outside the project right of way.

Basis of payment:

Shoulder Borrow, per cubic yard.

SHOULDER AND SLOPE BORROW

(3-19-13) 1019 SP10 R10

Use soil in accordance with Section 1019 of the 2012 Standard Specifications. Use soil consisting of loose, friable, sandy material with a PI greater than 6 and less than 25 and a pH ranging from 5.5 to 7.0.

Soil with a pH ranging from 4.0 to 5.5 will be accepted without further testing if additional limestone is provided in accordance with the application rates shown in Table 1019-1A. Soil type is identified during the soil analysis. Soils with a pH above 7.0 require acidic amendments to be added. Submit proposed acidic amendments to the Engineer for review and approval. Soils with a pH below 4.0 or that do not meet the PI requirements shall not be used.

TABLE 1019-1A ADDITIONAL LIMESTONE APPLICATION RATE TO RAISE pH				
pH TEST RESULT Sandy Soils Silt Loam Soils Clay Loam Soils Additional Rate (lbs. / Acre) (lbs. / Acre) Clay Loam Soils Additional Rate (lbs. / Acre)				
4.0 - 4.4	1,000	4,000	6,000	
4.5 - 4.9	500	3,000	5,000	
5.0 - 5.4	NA	2,000	4,000	

Note: Limestone application rates shown in this table are in addition to the standard rate of 4000 lbs. / acre required for seeding and mulching.

No direct payment will be made for providing additional lime or acidic amendments for Ph adjustment.

MILLING ASPHALT PAVEMENT, 0" TO 1.0"

Milling of existing asphalt pavements shall be done in accordance with Section 607 of the 2012 Standard Specifications or as directed by the Engineer. Perform the work covered by this section including, but not limited to, milling and re-milling the pavement at locations, depths, widths and typical sections indicated in the contract; cleaning the milled surface; loading, hauling and stockpiling the milled material for use in recycled asphalt mixtures; and disposal of any excess milled material. Except where the milled material is used in the work or where otherwise 1 directed, provide areas outside the right of way to dispose of milled material, which shall be property of the Contractor.

The "tie-ins" shall be milled at a depth of 0 inches to 1.0 inches fifty (50) feet on each side of the required road widening at the existing width of the roadway.

The Contractor shall remove and satisfactorily dispose of vegetation and debris from within the project limits. All waste disposal shall be in accordance with state, federal and local regulations and Section 802 of the 2012 Standard Specifications regarding the disposal of waste material. All permits and fees for any such disposal shall be the responsibility of the Contractor. NCDOT shall not be held liable for disposal of any materials outside the project right of way.

Basis of payment:

Milling of existing pavement, 0" to 1.0", per square yard.

INCIDENTAL STONE BASE

The Contractor shall furnish, place and shape a graded stone material for use in driveways, temporary maintenance of traffic, adjacent to mailboxes and at other locations as directed by the engineer. All work shall be done in accordance with Section 545 of the 2012 Standard Specifications.

Place incidental stone base on driveways, mailboxes, etc. immediately after paving and do not have the paving operations exceed stone base placement by more than one week without written permission of the Engineer.

Payment will be made under the item "Incidental Stone Base" and shall include, but not be limited to, furnishing aggregate with water, mixing, hauling, spreading materials, compacting, shaping and maintaining the stone base.

Basis of payment: Incidental Stone, per ton.

ASPHALT BINDER

The quantity of asphalt binder to be paid will be the theoretical number of tons required by the job mix formula. The contractor shall furnish the Engineer with documentation supporting the amount of asphalt binder used in the approved job mix formula for this project when invoicing for payment.

Basis of payment: Asphalt Binder, PG 64-22, per ton.

ASPHALT BINDER CONTENT OF ASPHALT PLANT MIXES

(44.04.00) (D. - 7.40.44)

The approximate asphalt binder content of the asphalt concrete plant mixtures used on this project will be as follows:

Asphalt Concrete Base Course	Type B 25.0B	4.4%
Asphalt Concrete Intermediate Course	Type I 19.0B	4.8%
Asphalt Concrete Surface Course	Type S 4.75A	6.8%
Asphalt Concrete Surface Course	Type SF 9.5A	6.7%
Asphalt Concrete Surface Course	Type S 9.5	6.0%
Asphalt Concrete Surface Course	Type S 12.5	5.5%

The actual asphalt binder content will be established during construction by the Engineer within the limits established in the 2012 Standard Specifications.

PRICE ADJUSTMENT - ASPHALT BINDER FOR PLANT MIX

Price adjustments for asphalt binder for plant mix will be made in accordance with Section 620 of the 2012 Standard Specifications as modified herein.

The base price index for asphalt binder for plant mix is \$573.13 per ton.

This base price index represents an average of F.O.B. selling prices of asphalt binder at supplier's terminals on September 1, 2013.

QUALITY MANAGEMENT SYSTEM - ASPHALT PLANT MIX PAVEMENTS

The production and construction of all asphalt mixtures and pavements shall be in accordance with the quality management system (QMS) as described in Section 609 of the 2012 Standard Specifications. This shall include all work specified in Section 609 of the 2012 Standard Specifications including field laboratory, all labor, tools, equipment, sampling, testing, record keeping, and incidentals necessary to complete the work.

No direct payment will be made for QMS. The cost of this work shall be included in the contract unit price per ton for Asphalt Concrete.

PAVING

The production, delivery, placement, and compaction of all bituminous material shall be in accordance with Section 610 of the 2012 Standard Specifications. A currently approved North Carolina Department of Transportation job mix formula shall be used for all bituminous construction.

The air temperature 48 continuous hours prior to paving must be above 32 degrees Fahrenheit. Air temperature at the time of paving shall be in accordance with Subarticle 610-4 of the 2012 Standard Specifications.

The Contractor shall compact the bituminous material on this project in accordance with Subarticle 610-9 of the 2012 Standard Specifications and the following provision:

Compact all final wearing surfaces using a minimum of two (2) steel wheel rollers, unless otherwise approved. Pneumatic-tired rollers with 2 tandem axles and smooth tread tires may be used for intermediate rolling.

Pavement shall not be placed until the base has been approved by the Engineer or his representative. A North Carolina Department of Transportation inspector shall be present during the placement of bituminous material.

The Contractor shall use a stringline or other approved method to establish a uniform consistent line to locate the edge of pavement. It shall be the Contractor's responsibility to place such line, but it shall meet the approval of the Engineer or his representative.

A smooth joint shall be provided at paved driveways. The Contractor shall exercise caution when operating equipment at paved residential drives in order to avoid pavement damage. An apron or turnout will be required at unpaved driveways.

The item of Asphalt Concrete Base Course Type B 25.0B (in place), Asphalt Concrete Intermediate Course Type I 19.0B (in place), Asphalt Concrete Surface Course Type SF9.5 A (in place) will include furnishing and placing of applicable Asphalt Concrete courses in accordance with the typical section, Section 610 of the 2012 Standard Specifications and an approved job mix formula.

Prior to placing the Asphalt Concrete Surface Course Type SF9.5 A, the "tie-ins" shall be milled at a depth of 0 inches to 1.0 inches fifty (50) feet on each side of the required road widening at the existing width of the roadway. This milling is required in order to provide a smooth transition between the new and existing pavement surfaces. Milling existing asphalt pavements shall be paid for separately is indicated elsewhere within this contract proposal.

Basis of payment:

Asphalt Concrete Base Course, Type B 25.0B, per ton. Asphalt Concrete Intermediate Course, Type I 19.0B, per ton.

Asphalt Concrete Surface Course, Type SF 9.5 A, per ton.

PAVEMENT QUANTITIES

SR#	FROM	то	WIDTH	LENGTH	TONS ACSC TYPE SF 9.5 A	TONS ACIC TYPE I 19.0 B	TONS ACBC TYPE B 25.0 B
1451	Begin widening	End widening	Varies	0.18 mile	303	222	311

ASPHALT PAVEMENTS - WARM MIX ASPHALT SUPERPAVE

Warm Mix Asphalt (WMA) is defined as additives or processes that allow a reduction in the temperature at which asphalt mixtures are produced and placed.

Notify the Engineer at least 2 weeks before producing the WMA so the Engineer can arrange a prepave meeting. Discuss special testing requirements necessary for WMA at the pre-pave meeting. Include at the pre-pave meeting the Contractor's QC manager, Paving Superintendent, and manufacturer's representative for the WMA technology, the Department's Roadway Construction Engineer, District Engineer, State Pavement Construction Engineer, and Quality Assurance Supervisor.

Require a manufacturer's representative for the WMA technology used to be present on site at the plant during the initial production and on the roadway during the laydown of the warm mix asphalt.

The requirement for the manufacturer's representative to be present at the pre-pave meeting and onsite at the plant may be waived by the Engineer based on previous work experience with the specific WMA technology used.

If the use of WMA is suspended during production, and the Contractor begins using Hot Mix Asphalt (HMA), then the Contractor shall be required to use HMA for the remainder of the specific route or map unless otherwise approved by the Engineer.

ASPHALT PAVEMENTS - SUPERPAVE

(6-19-12) (Rev. 10-15-13) 605, 609, 610, 650 SP6 R01

Revise the 2012 Standard Specifications as follows:

Page 6-3, Article 605-7 APPLICATION RATES AND TEMPERATURES, replace this article, including Table 601-1, with the following:

Apply tack coat uniformly across the existing surface at target application rates shown in Table 605-

TABLE 605-1 APPLICATION RATES FOR TACK COAT			
Existing Surface	Target Rate (gal/sy)		
Existing Surface	Emulsified Asphalt		
New Asphalt	0.04 ± 0.01		
Oxidized or Milled Asphalt	0.06 ± 0.01		
Concrete	0.08 ± 0.01		

Apply tack coat at a temperature within the ranges shown in Table 605-2. Tack coat shall not be overheated during storage, transport or at application.

TABLE 605-2 APPLICATION TEMPERATURE FOR TACK COAT				
Asphalt Material Temperature Range				
Asphalt Binder, Grade PG 64-22	350 - 400°F			
Emulsified Asphalt, Grade RS-1H	130 - 160°F			
Emulsified Asphalt, Grade CRS-1	130 - 160°F			
Emulsified Asphalt, Grade CRS-1H	130 - 160°F			
Emulsified Asphalt, Grade HFMS-1	130 - 160°F			
Emulsified Asphalt, Grade CRS-2	130 - 160°F			

Page 6-7, Article 609-3 FIELD VERIFICATION OF MIXTURE AND JOB MIX FORMULA ADJUSTMENTS, lines 35-37, delete the second sentence of the second paragraph.

Page 6-18, Article 610-1 DESCRIPTION, lines 40-41, delete the last sentence of the last paragraph.

Page 6-19, Subarticle 610-3(A) Mix Design-General, line 5, add the following as the first paragraph:

Warm mix asphalt (WMA) is allowed for use at the Contractor's option in accordance with the NCDOT Approved Products List for WMA Technologies available at:

https://connect.ncdot.gov/resources/Materials/MaterialsResources/WMA%20Approved%20Lists.pdf

ASPHALT PAVEMENTS – SUPERPAVE (continued)

Page 6-21, Subarticle 610-3(C) Job Mix Formula (JMF), replace Table 610-1 with the following:

TABLE 610-1 DESIGN MIXING TEMPERATURE AT THE ASPHALT PLANT ^A				
Binder Grade HMA WMA JMF Temperature JMF Temperature Range				
PG 64-22	300°F	225 - 275°F		
PG 70-22	315°F	240 - 290°F		
PG 76-22	335°F	260 - 310°F		

A. The mix temperature, when checked in the truck at the roadway, shall be within plus 15° and minus 25° of the temperature specified on the JMF.

Page 6-21, Subarticle 610-3(C) Job Mix Formula (JMF), lines 4-6, delete first sentence of the second paragraph. Line 7, in the second sentence of the second paragraph, replace "275°F" with "275°F or greater."

Page 6-22, Article 610-4 WEATHER, TEMPERATURE AND SEASONAL LIMITATIONS FOR PRODUCING AND PLACING ASPHALT MIXTURES, lines 15-17, replace the second sentence of the first paragraph with the following:

Do not place asphalt material when the air or surface temperatures, measured at the location of the paving operation away from artificial heat, do not meet Table 610-5.

Page 6-23, Article 610-4 WEATHER, TEMPERATURE AND SEASONAL LIMITATIONS FOR PRODUCING AND PLACING ASPHALT MIXTURES, replace Table 610-5 with the following:

TABLE 610-5 PLACEMENT TEMPERATURES FOR ASPHALT			
Asphalt Concrete Mix Type Minimum Surface and Air Temperat			
B25.0B, C	35°F		
I19.0B, C, D	35°F		
SF9.5A, S9.5B	40°F		
S9.5C, S12.5C	45°F		
S9.5D, S12.5D	50°F		

Page 6-26, Article 610-7 HAULING OF ASPHALT MIXTURE, lines 22-23, in the fourth sentence of the first paragraph replace "so as to overlap the top of the truck bed and" with "to".

Page 6-41, Subrticle 650-3(B) Mix Design Criteria, replace Table 650-1 with the following:

TABLE 650-1 OGAFC GRADATION CRITERIA				
Grading Requirements	Total Percent Passing			
Sieve Size (mm)	Type FC-1	Type FC-1 Modified	Type FC-2 Modified	
19.0	-	-	100	
12.5	100	100	80 - 100	
9.50	75 - 100	75 - 100	55 - 80	
4.75	25 - 45	25 - 45	15 - 30	
2.36	5 - 15	5 - 15	5 - 15	
0.075	1.0 - 3.0	1.0 - 3.0	2.0 - 4.0	

WORK ZONE TRAFFIC CONTROL GENERAL REQUIREMENTS

TEMPORARY TRAFFIC CONTROL (TTC):

(7-16-13) RWZ-1

Maintain traffic in accordance with Divisions 10, 11 and 12 of the 2012 Standard Specifications and the following provisions:

Install Work Zone Advance Warning Signs in accordance with the detail drawing provided in these plans prior to beginning any other work. Use a lane closure or slow moving operation to complete the work, as necessary, unless otherwise indicated. Refer to Standard Drawing No. 1101.02, 1101.11, 1110.01, 1110.02, 1130.01 1135.01 and 1180.01 of the 2012 Roadway Standard Drawings. Use a moving operation only if the minimum speed maintained at all times is 3 mph with no stops that narrow or close a lane of travel. If the moving operation is progressing slower than 3 mph at any time, install a lane closure. Maintain the existing traffic pattern at all times, except in the immediate work zone where lane closures are allowed as determined by the Engineer.

Refer to attached details and Standard Drawing No. 1101.02, 1101.03, 1101.04, 1101.05, 1101.11, 1110.01, 1110.02, 1115.01, 1130.01, 1135.01, 1145.01, 1150.01, 1165.01, and 1180.01 of the 2012 Roadway Standard Drawings when closing a lane of travel in a stationary work zone such as pavement patching resurfacing, or pavement marking removal. Properly ballasted cones and skinny drums may be used instead of drums. However, drums are required for the upstream taper portion of lane closures in all applications. The stationary work zone shall be a maximum of 1 mile in length at any given time on 2 Lane, 2 Way facilities unless otherwise approved by the Engineer. A pilot vehicle operation may be used in conjunction with flaggers and the appropriate pilot vehicle warning signing as directed by the Engineer. During periods of construction inactivity, return the traffic pattern to the existing alignment and remove or cover any work zone signs. When covering work zone signs, use an opaque material that prevents reading of the sign at night by a driver using high beam headlights. Use material, which does not damage the sign sheeting. Replace any obliterated markings as required by other sections of the 2012 Standard Specifications and the Engineer.

When personnel and/or equipment are working on the shoulder adjacent to and within 5 feet of an open travel lane, close the nearest open travel lane using Standard Drawing No. 1101.02 of the 2012 Roadway Standard Drawings. When personnel and/or equipment are working within a lane of travel of an undivided facility, close the lane according to the traffic control plans, 2012 Roadway Standard Drawings or as directed by the Engineer. Conduct the work so that all personnel and/or equipment remain within the closed travel lane. Do not work simultaneously, on both sides of an open travel way, within the same location, on a two-lane, two-way road. Perform work only when weather and visibility conditions allow safe operations as directed by the Engineer.

When utilizing a slow-moving operation for such items as pavement marking and marker placement, as a minimum the slow moving operation caravan shall consist of the vehicles and devices shown on the Moving Operation Caravan Details according to Roadway Standard Drawing No. 1101.02, sheet 11 of the 2012 Roadway Standard Drawings. Traffic cones may be used when necessary to provide additional protection of wet pavement markings. Ballast all traffic cones so they will not be blown over by traffic.

TRAFFIC OPERATIONS:

1) Drop-Off Requirements and Time Limitations:

Do not exceed a difference of 2 inches in elevation between open lanes of traffic for nominal lifts of 1.5 inches

During a resurfacing only operation, bring all newly resurfaced lanes to the same elevation within 72 hours for nominal lifts of 1.5 inches or less of asphalt course and by the end of each work day for nominal lifts of greater than 1.5 inches of asphalt course

Backfill at a 6:1 slope up to the edge and elevation of existing pavement in areas adjacent to an open travel lane that has an edge of pavement drop-off as follows:

- (A) Drop-off that exceeds 2 inches on roadways with posted speed limits of 45 mph or greater.
- (B) Drop-off that exceeds 3 inches on roadways with posted speed limit less than 45 mph.

WORK ZONE TRAFFIC CONTROL GENERAL REQUIREMENTS (continued)

For drop-offs that exceed the above requirements, backfill the unacceptable drop-off with suitable compacted material, as approved by the Engineer. The material, equipment and labor associated with this operation will be at no expense to the Department. This work is not considered part of shoulder reconstruction.

2) Project Requirements:

Failure to comply with the following requirements will result in a suspension of all other operations:

 Before working on ANY MAP, the Contractor shall submit a written construction sequence for traffic control and construction lighting for ALL MAPS to the Engineer at the first pre-construction meeting and the sequence must be approved before closing a lane of traffic. The Contractor and Engineer will coordinate with the Traffic Management Unit at 919-773-2800 or Traffic Services for

additional traffic control guidance, as necessary.

2. Coordinate the installation of items required by the contract documents and resurfacing operations such that these operations are completed in the order as agreed upon with the Engineer at the first pre-construction meeting. Refer to the Provisions, Typicals and Details

unless otherwise directed by the Engineer.

3. Once the Contractor has started work at a location, the Contractor should prosecute the work in a continuous and uninterrupted manner from the time he begins the work until completion and final acceptance unless determined otherwise by the Engineer.

4. Obtain written approval of the Engineer before working in more than one location or setting up

additional lane closures.

5. Mainline pavement shall not be left milled, unmarked or uneven at the end of a paving season.

 Contractor shall mill and pave lanes in an order such that water shall not accumulate.
 Traffic Control for the milling and/or paving of ramps is to be done according to Standard Drawing Number 1101.02, Sheets 9 & 10 unless otherwise approved to be closed by the Engineer. If approved, Contractor will provide plans and devices for the detour at no additional cost to the department.

8. If lane closure restrictions apply, see Special Provision, "Intermediate Contract Times and

Liquidated Damages".

Notify the Engineer 15 consecutive calendar days before resurfacing a bridge or its approaches. Patch and make repairs to bridge surface and its approaches before resurfacing occurs. Coordinate all operations on the bridge and its approaches with the Engineer.

Notify the Engineer 48 hours before resurfacing the areas of existing pavement that require patching. Patch these areas before resurfacing occurs. Allow full depth asphalt patching to cool to the point of supporting traffic without displacement or rutting before reopening closed lane. Coordinate the resurfacing operations of the patched areas with the Engineer.

Notify the Engineer 48 hours before milling or resurfacing will interfere with the existing Signal Loops. Loops may need to be placed in milled surface before resurfacing occurs. Coordinate all signal loop operations with the Engineer.

For partial or wheel track milling operations on two-way, two-lane facilities, mill and pave back by the end of each work day. For Partial or wheel track milling operation on multi-lane facilities, the lane being milled may be left closed and paved back within 72 hours.

The following options are available during Resurfacing and milling operations on two-way, two-lane facilities when the entire roadway or entire lane is to be milled:

Mill a single lane and pave back by the end of each work day.

ÌΒί Mill the entire width of roadway and pave back within 72 hours.

The following options are available during Resurfacing and milling operations on multi-lane facilities when all lanes or a single lane in one direction are to be milled:

Mill a single lane and pave back by the end of each work day.

ÌΒί Mill the entire width of pavement for all lanes to be milled in any direction daily and pave back within 72 hours.

WORK ZONE TRAFFIC CONTROL GENERAL REQUIREMENTS (continued)

Slope the pavement at the beginning and ending of the daily milling operation as directed by the Engineer. Sweep and remove all milled material from the roadway as soon as the daily milling operation is completed. Continue milling operations until the particular section of roadway being milled is complete. Remove any existing pavement adjacent to the milled area that has been damaged and replace with patch material as directed by the Engineer.

Operate equipment and conduct operations in the same direction as the flow of traffic. Maintain vehicular access in accordance with Article 1101-05 of the 2012 Standard Specifications using suitable backfill material approved by the Engineer.

Provide appropriate lighting in accordance with Section 1413 of the 2012 Standard Specifications.

Review and record the existing pavement markings and markers prior to resurfacing. Use the record of existing pavement markings and markers in accordance with the 2012 Roadway Standard Drawings to identify "no passing zones" and to re-establish the proposed pavement markings and markers unless otherwise directed by the Engineer.

Remove existing pavement markers in preparation for paving. Repair any pavement damage due to existing pavement marker removal prior to the end of the work day. Dispose of existing pavement markers as directed by the Engineer. No direct payment will be made for this work, as it will be incidental to the paving operation.

Payment will be made for the traffic control items that have been included in the contract. No direct payment will be made for providing other traffic control as required herein, as the cost of same will be considered incidental to the work being paid for under those various traffic control items that have been included. Where the Contractor maintains traffic as required herein but no specific pay items have been included in the contract, all associated costs will be considered incidental to the work being paid for under the various items in the contract.

3) Work Zone Signing:

Description

Install advance/general warning work zone signs according to the Detail Drawing provided in these plans prior to beginning of work. Install and maintain signing in accordance with the attached drawings and Divisions 11 and 12 of the 2012 Standard Specifications.

(A) Installation

Install all Advance/General warning work zone signs before beginning work on a particular map. If signs are installed more than seven (7) calendar days prior to the beginning of work on a particular map, cover the signs until the work begins. Install each work zone Advance/General warning sign separately and not on the same post or stand with any other sign except where an advisory speed plate or directional arrow is used.

All stationary signing is to be installed as shown on the detail drawing unless otherwise directed by the Engineer. Once the signs have been installed, any sign relocations requested by the Department will be compensated in accordance with Section 104-7. Any additional signs other than the ones shown in the drawing will be compensated in accordance with Section 104-7.

No –Y- Line advance warning signage is required unless there's more than 1,000 feet of resurfacing along the –Y- line. Whenever work proceeds through an intersection, portable signs shall be used for traffic control. There will be no direct compensation for any portable signing.

If there is a period of construction inactivity longer than 14 calendar days, remove or cover advance/general warning work zone signs. Uncover advance/general warning work zone signs no more than 7 calendar days before work resumes. All other operations may be suspended upon failure to comply with the above requirements. Such suspended operations would not be resumed until the above requirements are fulfilled.

WORK ZONE TRAFFIC CONTROL GENERAL REQUIREMENTS (continued)

(B) Sign Removal

All stationary work zone signs shall be removed once the project is substantially complete. The project is substantially complete when the resurfacing operations are completed and the shoulders are brought up to the same elevation as the proposed pavement and when pavement markings are installed. The pavement marking doesn't have to be the final marking material to be considered substantially complete. Any remaining punch list items are to be completed with portable work zone signing. There will be no compensation for any portable signing. Sign removal is a condition of final project acceptance.

(C) Lane Closure Work Zone Signs

Install any required lane closure signing needed during the life of the project in accordance with the Standard Drawing No. 1101.02, 1101.11 and 1110.02 of the 2012 Roadway Standard Drawings. Any required portable signs for lane closures are compensated in the contract pay item for Temporary Traffic Control.

Payment will be made for the work zone signing items that have been included in the contract. No direct payment will be made for providing other work zone signing as required herein, as the cost of same will be considered incidental to the work being paid for under those various work zone signing items that have been included. Where the Contractor provides work zone signing as required herein but no specific pay items have been included in the contract, all associated costs will be considered incidental to the work being paid for under the various items in the contract.

TIME LIMITATION FOR PAVEMENT MARKINGS AND MARKERS ON NEWLY RESURFACED AREAS:

Markings: Two-Lane, Two-Way Facilities

For all two-lane, two-way facilities, place all edge lines and other symbols within 30 calendar days after they have been obliterated by the resurfacing operation. This 30 day requirement is an exception to the 15 day requirement in the 2012 Standard Specifications. All other pavement marking shall be installed in accordance with the 2012 Standard Specifications and the 2012 Roadway Standard Drawings 1205.01 through 1205.13.

Markings: All Facilities

Final pavement markings on a specific map are subject to an observation period that begins with the satisfactory completion of all pavement markings required on a specific map in accordance with Subarticle 1205-3(H) of the 2012 Standard Specifications. Pavement markings shall be installed in accordance with the 2012 Standard Specifications and the 2012 Roadway Standard Drawings 1205.01 through 1205.13 with the exception of the 30 day edge line requirement for 2 lane roads as described above.

All characters, symbols and stop bars on concrete shall be either Type 2 or Type 3 Cold Applied Plastic or Heated-In-Place Thermoplastic as shown on NCDOT Approved Product List. The quantity for characters, symbols and stop bars on concrete will be included in the pay items for Type 2 Cold Applied Plastic.

All characters, symbols and stop bars on asphalt shall be either Heated-In-Place Thermoplastic or Extruded Thermoplastic as shown on NCDOT Approved Product List. The quantity for characters, symbols and stop bars on asphalt will be included in the pay items for Heated-In-Place Thermoplastic.

Markers: All Facilities

Install permanent pavement markers within 60 calendar days after completing the resurfacing on each map. Pavement markers shall be installed in accordance with the 2012 Standard Specifications and the 2012 Roadway Standard Drawing 1205.12 and 2012 Roadway Standard Drawings 1250.01 through 1253.01.

Milled Rumble Strips:

When utilized, milled rumble strips shall be installed in accordance with the 2012 Standard Specifications and the 2012 Roadway Standard Drawing 665.01.

ROADWAY STANDARD DRAWINGS FOR PAVEMENT MARKINGS AND MARKERS

(01-17-12) RWZ-5

Use the following in conjunction with the 2012 Standard Specifications:

Standard Pavement Markings 2012 Roadway Standard Drawings:

1205.01, 1205.02, 1205.03, 1205.04, 1205.05, 1205.06, 1205.07, 1205.08, 1205.09, 1205.10,

1205.11, 1205.12, 1205.13

Raised Pavement Markers 2012 Roadway Standard Drawings:

1205.12, 1250.01, 1251.01

Snowplowable Pavement

Markers

2012 Roadway Standard Drawings:

1250.01, 1253.01

Milled Rumble Strips 2012 Roadway Standard Drawings:

665.01

EROSION, SILTATION, AND POLLUTION CONTROL

The Contractor shall exercise every reasonable precaution and take all necessary measures throughout the life of the project to prevent erosion, siltation, and pollution in accordance with the applicable section of the 2012 Standard Specifications. Erosion control measures shall be installed and maintained in accordance with the plans for this project, Division 16 of the 2012 Standard Specifications, Section 1630 of the 2012 Standard Specifications, the NCDOT Best Management Practices for Construction and Maintenance Activities and in locations directed by the Engineer or his representative.

The NCDOT <u>Best Management Practices for Construction and Maintenance Activities</u> manual can be found on the Internet at the following web address:

http://ncdot.org/doh/operations/BMP_manual/default.html

Once the Engineer has determined that 80% coverage of permanent vegetation has been established, the Contractor will be notified to remove the remaining erosion control devices that are no longer needed. The Contractor will be responsible for, and shall correct any areas disturbed by operations performed in permanent vegetation establishment and the removal of temporary erosion control measures, whether occurring prior to or after placing traffic on the project.

No additional compensation will be made for maintenance and removal of temporary erosion control items. Final payment or retainage shall be held until such time as the Roadside Field Operations Unit releases the project from Erosion Control compliance review and all temporary erosion control items have been removed to the satisfaction of the Engineer.

Within seven (7) calendar days to fourteen (14) calendar days of completion of any phase of grading, all disturbed areas shall be planted or otherwise provided with temporary or permanent ground cover, devices, or structures sufficient to restrain erosion. The Erosion and Sediment Control plan will identify the areas that require seven (7) and/or fourteen (14) calendar day ground stabilization. The Contractor is herein advised to follow all current regulations set forth by the North Carolina Department of Environment and Natural Resources (NCDENR) Division of Water Quality (DWQ) as defined in the *General Stormwater Permit for Construction Activities NCG010000*.

The excavation of silt (maintenance) from erosion control devices shall be considered incidental to the maintenance of all applicable erosion control devices. There shall be no direct payment for silt excavation from erosion control devices.

STABILIZATION REQUIREMENTS

Stabilization for this project shall comply with the time frame guidelines as specified by the NCG-010000 general construction permit effective August 3, 2011 issued by the North Carolina Department of Environment and Natural Resources Division of Water Quality. Temporary or permanent ground cover stabilization shall occur within 7 calendar days from the last land disturbing activity, with the following exceptions in which temporary or permanent ground cover shall be provided in 14 calendar days from the last land-disturbing activity:

- Slopes between 2:1 and 3:1, with a slope length of 10 ft. or less
- Slopes 3:1 or flatter, with a slope of length of 50 ft. or less
- Slopes 4:1 or flatter

The stabilization timeframe for High Quality Water (HQW) Zones shall be 7 calendar days with no exceptions for slope grades or lengths. High Quality Water Zones (HQW) Zones are defined by North Carolina Administrative Code 15A NCAC 04A.0105 (25). Temporary and permanent ground cover stabilization shall be achieved in accordance with the provisions in this contract and as directed.

PERMANENT VEGETATION ESTABLISHMENT

(2-16-12) (Rev. 10-15-13) 104 SP1 G16

Establish a permanent stand of the vegetation mixture shown in the contract. During the period between initial vegetation planting and final project acceptance, perform all work necessary to establish permanent vegetation on all erodible areas within the project limits, as well as, in borrow and waste pits. This work shall include erosion control device maintenance and installation, repair seeding and mulching, supplemental seeding and mulching, mowing, and fertilizer topdressing, as directed. All work shall be performed in accordance with the applicable section of the 2012 Standard Specifications. All work required for initial vegetation planting shall be performed as a part of the work necessary for the completion and acceptance of the Intermediate Contract Time (ICT). Between the time of ICT and Final Project acceptance, or otherwise referred to as the vegetation establishment period, the Department will be responsible for preparing the required National Pollutant Discharge Elimination System (NPDES) inspection records.

Once the Engineer has determined that the permanent vegetation establishment requirement has been achieved at an 80% vegetation density (the amount of established vegetation per given area to stabilize the soil) and no erodible areas exist within the project limits, the Contractor will be notified to remove the remaining erosion control devices that are no longer needed. The Contractor will be responsible for, and shall correct any areas disturbed by operations performed in permanent vegetation establishment and the removal of temporary erosion control measures, whether occurring prior to or after placing traffic on the project.

Payment for Response for Erosion Control, Seeding and Mulching, Repair Seeding, Supplemental Seeding, Mowing, Fertilizer Topdressing, Silt Excavation, and Stone for Erosion Control will be made at contract unit prices for the affected items. Work required that is not represented by contract line items will be paid in accordance with Articles 104-7 or 104-3 of the 2012 Standard Specifications. No additional compensation will be made for maintenance and removal of temporary erosion control items.

SEEDING AND MULCHING (PERMANENT)

The Contractor shall seed all disturbed areas as directed by the Engineer, in accordance with Section 1660 of the 2012 Standard Specifications. Seeding and mulching shall immediately follow shoulder construction operations and in no case shall shoulder construction operations exceed seeding and mulching operations by more than two weeks without written permission of the Engineer. Failure to meet this requirement shall be cause to cease all operations until it can be met.

Seeding and Mulching: (East)

The kinds of seed and fertilizer, and the rates of application of seed, fertilizer, and limestone, shall be as stated below. During periods of overlapping dates, the kind of seed to be used shall be determined by the Engineer. All rates are in pounds per acre.

The kinds of seed and fertilizer, and the rates of application of seed, fertilizer, and limestone, shall be as stated below. During periods of overlapping dates, the kind of seed to be used shall be determined. All rates are in pounds per acre.

All Roadway Areas

March 1	- August 31	September 1 - February 28				
50#	Tall Fescue	50 #	Tall Fescue			
10#	Centipede	10#	Centipede			
25#	Bermudagrass (hulled)	35#	Bermudagrass (unhulled)			
500# 4000#	Fertilizér Limestone	500# 4000#	Fertilizer ´ Limestone			

Waste and Borrow Locations

March 1	August 31	Septembe	September 1 - February 28				
75#	Tall Fescue	75 #	Tall Fescue				
25#	Bermudagrass	35#	Bermudagrass				
E00#	(hulled)	E00#	(unhulled)				
500#	Fertilizer	500#	Fertilizer ´				
4000#	Limestone	4000#	Limestone				

SEEDING AND MULCHING (PERMANENT) (continued)

Note: 50# of Bahiagrass may be substituted for either Centipede or Bermudagrass only upon Engineer's request.

Approved Tall Fescue Cultivars

2 ^{na}	Duster	Magellan	Rendition
Millennium Avenger Barlexas Barlexas II Barrera Barrington Biltmore Bingo Bravo Cayenne Chapel Hill Chesapeake Constitution Chipper Coronado Coyote Davinci Dynasty Dominion	Endeavor Escalade Falcon II, III, IV & V Fidelity Finesse II Firebird Focus Grande II Greenkeeper Greystone Inferno Justice Jaguar 3 Kalahari Kentucky 31 Kitty Hawk Kitty Hawk Lexington	Masterpiece Matador Matador GT Millennium Montauk Mustang 3 Olympic Gold Padre Paraiso Picasso Piedmont Pure Gold Prospect Quest Rebel Exeda Rebel Sentry Regiment II Rembrandt	Scorpion Shelby Signia Silverstar Southern Choice II Stetson Tarheel Titan Ltd Titanium Tomahawk Tacer Trooper Turbo Ultimate Watchdog Wolfpack

On cut and fill slopes 2:1 or steeper Centipede shall be applied at the rate of 5 pounds per acre and add 20# of Sericea Lespedeza from January 1 - December 31.

Fertilizer shall be 10-20-20 analysis. A different analysis of fertilizer may be used provided the 1-2-2 ratio is maintained and the rate of application adjusted to provide the same amount of plant food as a 10-20-20 analysis and as directed.

All areas seeded and mulched shall be tacked with asphalt. Crimping of straw in lieu of asphalt tack shall not be allowed on this project.

CRIMPING STRAW MULCH

Crimping shall be required on this project adjacent to any section of roadway where traffic is to be maintained or allowed during construction. In areas within six feet of the edge of pavement, straw is to be applied and then crimped. After the crimping operation is complete, an additional application of straw shall be applied and immediately tacked with a sufficient amount of undiluted emulsified asphalt.

Straw mulch shall be of sufficient length and quality to withstand the crimping operation.

Crimping equipment including power source shall be subject to the approval of the Engineer providing that maximum spacing of crimper blades shall not exceed 8".

Within seven (7) calendar days to fourteen (14) calendar days of completion of any phase of grading, all disturbed areas shall be planted or otherwise provided with temporary or permanent ground cover, devices, or structures sufficient to restrain erosion. The Erosion and Sediment Control plan will identify the areas that require seven (7) and/or fourteen (14) calendar day ground stabilization. The Contractor is herein advised to follow all current regulations set forth by the North Carolina Department of Environment and Natural Resources (NCDENR) Division of Water Quality (DWQ) as defined in the *General Stormwater Permit for Construction Activities NCG-010000*.

Basis of payment:

Seeding and Mulching, per acre.

ROLLED EROSION CONTROL PRODUCTS (EXCELSIOR MATTING FOR EROSION CONTROL)

Description

Furnish, place and maintain a rolled erosion control product (matting) on previously shaped and seeded drainage ditches, slopes or other areas at locations shown in the contract or as directed. Work includes providing all materials, excavation and backfilling, placing and securing matting and maintaining the drainage ditch. The conditions which occur during the construction of the project will determine the quantity of matting placed. The quantity of matting may be increased, decreased or eliminated entirely as directed. Such variations in quantity will not be considered as alterations in the details of construction or a change in the character of the work.

Materials

Refer to Division 10.

Item	Section
Matting for Erosion Control Staples	1060-8 1060-8

Construction Methods

Place matting immediately following seeding. Provide a smooth soil surface free from stones, clods or debris that will prevent the contact of the matting with the soil. Preserve the required line, grade and cross section of the area covered. Unroll matting in the direction of the flow of water and apply without stretching so that it will lie smoothly but loosely on the soil surface. Bury the up-channel or top of slope end of each piece of matting in a narrow trench at least 6" deep and tamp firmly. Where one roll of matting ends and a second-roll begins, overlap the end of the upper roll over the buried end of the second roll so there is a 4" overlap. Construct staple checks 4" on center and every 30 ft longitudinally in the matting or as directed. Fold over and bury matting to the full depth of the trench, close and tamp firmly. Overlap matting at least 4" where 2 or more widths of matting are laid side by side. Place staples across matting at ends, junctions and check trenches approximately 10" apart. Place staples along the outer edges and down the center of each strip of matting 3 ft apart. Place staples along all lapped edges 10" apart. Install product with netting on the top side when excelsior or straw matting is used. The Engineer may require adjustments in the trenching or stapling requirements to fit individual cut or fill slope conditions.

Measurement and Payment

Matting will be measured and paid in square yards as measured along the surface of the ground, over which matting has been acceptably placed.

Basis of payment:

Eight foot (8') Excelsior Matting for Erosion Control, per square yard (contingent item).

WATTLES WITH POLYACRYLAMIDE (PAM)

Description

Wattles are tubular products consisting of excelsior fibers encased in synthetic netting. Wattles are used on slopes or channels to intercept runoff and act as a velocity break. Wattles are to be placed at locations shown on the plans or as directed. Installation shall follow the detail provided in the plans and as directed. Work includes furnishing materials, installation of wattles, matting installation, PAM application, and *removing* wattles.

Materials

Wattle shall meet the following specifications:

100% Curled Wood(Excelsior) Fibers

Minimum Diameter 12 in.

Minimum Density 2.5 lb/ft³ +/- 10%

Net Material Synthetic Net Openings 1 in. x 1 in.

Net Configuration Totally Encased

Minimum Weight 20 lb. +/- 10% per 10 ft. length

Anchors: Stakes shall be used as anchors.

Wooden Stakes:

Provide hardwood stakes a minimum of 2-ft. long with a 2 in. x 2 in. nominal square cross section. One end of the stake must be sharpened or beveled to facilitate driving down into the underlying soil.

Matting shall meet the requirements of section 1060-8 of the 2012 Standard Specifications, or shall meet specifications provided elsewhere in this contract.

Provide staples made of 0.125" diameter new steel wire formed into a *u* shape not less than 12" in length with a throat of 1" in width.

Polyacrylamide (PAM) shall be applied in powder form and shall be anionic or neutrally charged. Soil samples shall be obtained in areas where the wattles will be placed, and from offsite material used to construct the roadway, and analyzed for the appropriate PAM flocculant to be utilized with each wattle.

Construction Methods

Wattles shall be secured to the soil by wire staples approximately every 1 linear foot and at the end of each section of wattle. A minimum of 4 stakes shall be installed on the downstream side of the wattle with a maximum spacing of 2 linear feet along the wattle, and according to the detail. Install a minimum of 2 stakes on the upstream side of the wattle according to the detail provided in the plans. Stakes shall be driven into the ground a minimum of 10 in. with no more than 2 in. projecting from the top of the wattle. Drive stakes at an angle according to the detail provided in the plans.

Install wattles to the top of the ditch according to the detail provided in the plans. Overlap adjoining sections of wattles a minimum of 6 in.

Installation of matting shall be in accordance with the detail provided in the plans, and in accordance with section 1631-3(B) of the 2012 Standard Specifications, or in accordance with specifications provided elsewhere in this contract.

Apply PAM over the lower center portion of the wattle where the water is going to flow over at a rate of 3.5 ounces per wattle. PAM applications shall be done during construction activities after every rainfall event that is equal to or exceeds 0.50 in.

WATTLES WITH POLYACRYLAMIDE (PAM) (continued)

The Contractor shall maintain the wattles until the project is accepted or until the wattles are removed, and shall remove and dispose of silt accumulations at the wattles when so directed in accordance with the requirements of Section 1630 of the 2012 Standard Specifications.

Measurement and Payment

Wattles will be measured and paid for by the actual number of linear feet of wattles which are installed and accepted. Such price and payment will be full compensation for all work covered by this section, including, but not limited to, furnishing all materials, labor, equipment and incidentals necessary to install the Wattles.

Polyacrylamide(PAM) will be measured and paid for by the actual weight in pounds of PAM applied to the wattles. Such price and payment will be full compensation for all work covered by this section, including, but not limited to, furnishing all materials, labor, equipment and incidentals necessary to apply the Polyacrylamide(PAM).

There shall be no direct payment for Matting, Staples or any other items necessary for the construction of the Wattles with Polyacrylamide. These items shall be considered incidental to the construction of the Wattles with Polyacrylamide.

The excavation of silt (maintenance) from erosion control devices shall be considered incidental to the maintenance of all applicable erosion control devices. There shall be no direct payment for silt excavation from erosion control devices.

Basis of payment:

Wattle, per linear foot, (contingent item),

Polyacrylamide (PAM), per pound, (contingent item).

EROSION AND STORMWATER CONTROL FOR SHOULDER CONSTRUCTION AND RECONSTRUCTION

(11-16-10) (Rev. 8-21-12)

105-16, 225-2, Division 16

SP16 R03R

Land disturbing operations associated with shoulder construction/reconstruction may require erosion and sediment control/stormwater measure installation. National Pollutant Discharge Elimination System (NPDES) inspection and reporting may be required.

Erosion control measures shall be installed per the erosion control detail in any area where the vegetated buffer between the disturbed area and surface waters (streams, wetlands, or open waters) or drainage inlet is less than 10 feet. The Engineer may reduce the vegetated buffer threshold for this requirement to a value between 5 and 10 feet. Erosion control measures shall be spot checked every 14 days until permanent vegetative establishment.

In areas where shoulder construction/reconstruction includes disturbance or grading on the front slope or to the toe of fill, relocating ditch line or backslope, or removing vegetation from the ditch line or swale, NPDES inspection and monitoring are required every 14 days or within 24 hours of a rainfall event of 0.5" or greater. Maintain daily rainfall records. Install erosion control measures per detail.

In areas where the vegetated buffer is less than 10 feet between the disturbed area and waters of the State classified as High Quality Water (HQW), Outstanding Resource Water (ORW), Critical Areas, or Unique Wetlands, NPDES inspection and monitoring are required every 14 days or within 24 hours of a rainfall event of 0.5" or greater. The Engineer may reduce the vegetated buffer threshold for this requirement to a value between 5 and 10 feet. The plans or provisions will indicate the presence of these water classifications. Maintain daily rainfall records. Install erosion control measures per detail.

Land disturbances hardened with aggregate materials receiving sheet flow are considered non-erodible.

Sites that require lengthy sections of silt fence may substitute with rapid permanent seeding and mulching as directed by the Engineer.

NPDES documentation shall be performed by a Level II Erosion and Sediment Control/Stormwater certificate holder.

Materials used for erosion control will be measured and paid as stated in the contract.

EROSION AND SEDIMENT CONTROL/STORMWATER CERTIFICATION

(1-16-07) (Rev 9-18-12) 105-16, 225-2, 16 SP1 G180

General

Schedule and conduct construction activities in a manner that will minimize soil erosion and the resulting sedimentation and turbidity of surface waters. Comply with the requirements herein regardless of whether or not a National Pollution discharge Elimination System (NPDES) permit for the work is required.

Establish a chain of responsibility for operations and subcontractors' operations to ensure that the *Erosion and Sediment Control/Stormwater Pollution Prevention Plan* is implemented and maintained over the life of the contract.

- (A) Certified Supervisor Provide a certified Erosion and Sediment Control/Stormwater Supervisor to manage the Contractor and subcontractor operations, insure compliance with Federal, State and Local ordinances and regulations, and manage the Quality Control Program.
- (B) Certified Foreman Provide a certified, trained foreman for each construction operation that increases the potential for soil erosion or the possible sedimentation and turbidity of surface waters.
- (C) Certified Installer Provide a certified installer to install or direct the installation for erosion or sediment/stormwater control practices.
- (D) Certified Designer Provide a certified designer for the design of the erosion and sediment control/stormwater component of reclamation plans and, if applicable, for the design of the project erosion and sediment control/stormwater plan.

Roles and Responsibilities

- (A) Certified Erosion and Sediment Control/Stormwater Supervisor The Certified Supervisor shall be Level II and responsible for ensuring the erosion and sediment control/stormwater plan is adequately implemented and maintained on the project and for conducting the quality control program. The Certified Supervisor shall be on the project within 24 hours notice from initial exposure of an erodible surface to the project's final acceptance. Perform the following duties:
 - (1) Manage Operations Coordinate and schedule the work of subcontractors so that erosion and sediment control/stormwater measures are fully executed for each operation and in a timely manner over the duration of the contract.
 - (a) Oversee the work of subcontractors so that appropriate erosion and sediment control/stormwater preventive measures are conformed to at each stage of the work.
 - (b) Prepare the required National Pollutant Discharge Elimination System (NPDES) Inspection Record and submit to the Engineer.
 - (c) Attend all weekly or monthly construction meetings to discuss the findings of the NPDES inspection and other related issues.
 - (d) Implement the erosion and sediment control/stormwater site plans requested.
 - (e) Provide any needed erosion and sediment control/stormwater practices for the Contractor's temporary work not shown on the plans, such as, but not limited to work platforms, temporary construction, pumping operations, plant and storage yards, and cofferdams.
 - (f) Acquire applicable permits and comply with requirements for borrow pits, dewatering, and any temporary work conducted by the Contractor in jurisdictional areas.
 - (g) Conduct all erosion and sediment control/stormwater work in a timely and workmanlike manner.
 - (h) Fully perform and install erosion and sediment control/stormwater work prior to any suspension of the work.
 - (i) Coordinate with Department, Federal, State and Local Regulatory agencies on resolution of erosion and sediment control/stormwater issues due to the Contractor's operations.

(j) Ensure that proper cleanup occurs from vehicle tracking on paved surfaces or

any location where sediment leaves the Right-of-Way.

Have available a set of erosion and sediment control/stormwater plans that are (k) initialed and include the installation date of Best Management Practices. These practices shall include temporary and permanent groundcover and be properly updated to reflect necessary plan and field changes for use and review by Department personnel as well as regulatory agencies.

- Requirements set forth under the NPDES Permit The Department's NPDES (2)Stormwater permit (NCS000250) outlines certain objectives and management measures pertaining to construction activities. The permit references NCG010000, General Permit to Discharge Stormwater under the NPDES, and states that the Department shall incorporate the applicable requirements into its delegated Erosion and Sediment Control Program for construction activities disturbing one or more acres of land. The Department further incorporates these requirements on all contracted bridge and culvert work at jurisdictional waters, regardless of size. Some of the requirements are, but are not limited to:
 - Control project site waste to prevent contamination of surface or ground waters of the state, i.e. from equipment operation/maintenance, construction materials, concrete washout, chemicals, litter, fuels, lubricants, coolants, hydraulic fluids, any other petroleum products, and sanitary waste.
 - (b) Inspect erosion and sediment control/stormwater devices and stormwater discharge outfalls at least once every 7 calendar days, twice weekly for construction related Federal Clean Water Act, Section 303(d) impaired streams with turbidity violations, and within 24 hours after a significant rainfall event of 0.5 inch that occurs within a 24 hour period.

(c) Maintain an onsite rain gauge or use the Department's Multi-Sensor Precipitation Estimate website to maintain a daily record of rainfall amounts and

Maintain erosion and sediment control/stormwater inspection records for review (d) by Department and Regulatory personnel upon request.
Implement approved reclamation plans on all borrow pits, waste sites and

(e)

staging areas.

Maintain a log of turbidity test results as outlined in the Department's Procedure (f) for Monitoring Borrow Pit Discharge.

Provide secondary containment for bulk storage of liquid materials.

Provide training for employees concerning general erosion and sediment control/stormwater awareness, the Department's NPDES Stormwater Permit NCS000250 requirements, and the applicable requirements of the General Permit, NCG010000.

Report violations of the NPDES permit to the Engineer immediately who will (i) notify the Division of Water Quality Regional Office within 24 hours of becoming

aware of the violation.

- (3)Quality Control Program - Maintain a quality control program to control erosion, prevent sedimentation and follow provisions/conditions of permits. The quality control program shall:
 - Follow permit requirements related to the Contractor and subcontractors' (a) construction activities.
 - (b) Ensure that all operators and subcontractors on site have the proper erosion and sediment control/stormwater certification.
 - Notify the Engineer when the required certified erosion and sediment (c) control/stormwater personnel are not available on the job site when needed.

Conduct the inspections required by the NPDES permit.

(e) Take corrective actions in the proper timeframe as required by the NPDES

permit for problem areas identified during the NPDES inspections.

(f) Incorporate erosion control into the work in a timely manner and stabilize disturbed areas with mulch/seed or vegetative cover on a section-by-section basis.

- (g) Use flocculants approved by state regulatory authorities where appropriate and where required for turbidity and sedimentation reduction.
- Ensure proper installation and maintenance of temporary erosion and sediment (h) control devices.
- Remove temporary erosion or sediment control devices when they are no longer (i) necessary as agreed upon by the Engineer.
- The Contractor's quality control and inspection procedures shall be subject to review by the Engineer. Maintain NPDES inspection records and make records (j) available at all times for verification by the Engineer.
- Certified Foreman At least one Certified Foreman shall be onsite for each type of work listed (B) herein during the respective construction activities to control erosion, prevent sedimentation and follow permit provisions:
 - Foreman in charge of grading activities
 - Foreman in charge of bridge or culvert construction over jurisdictional areas
 - Foreman in charge of utility activities

The Contractor may request to use the same person as the Level II Supervisor and Level II Foreman. This person shall be onsite whenever construction activities as described above are taking place. This request shall be approved by the Engineer prior to work beginning.

The Contractor may request to name a single Level II Foreman to oversee multiple construction activities on small bridge or culvert replacement projects. This request shall be approved by the Engineer prior to work beginning.

- (C) Certified Installers - Provide at least one onsite, Level I Certified Installer for each of the following erosion and sediment control/stormwater crew:
 - Seeding and Mulching

 - Temporary Seeding Temporary Mulching

 - Sodding Silt fence or other perimeter erosion/sediment control device installations
 - Erosion control blanket installation
 - (1) (2) (3) (4) (5) (6) (7) (8) Hydraulic tackifier installation
 - Turbidity curtain installation
 - (9) Rock ditch check/sediment dam installation
 - (10) Ditch liner/matting installation
 - (11) Inlet protection
 - ີ 12ໂ Riprap placement
 - (13) Stormwater BMP installations (such as but not limited to level spreaders, retention/detention devices)
 - Pipe installations within jurisdictional areas (14)

If a Level I Certified Installer is not onsite, the Contractor may substitute a Level II Foreman for a Level I Installer, provided the Level II Foreman is not tasked to another crew requiring Level Il Foreman oversight.

Certified Designer - Include the certification number of the Level III-B Certified Designer on the (D) erosion and sediment control/stormwater component of all reclamation plans and if applicable, the certification number of the Level III-A Certified Designer on the design of the project erosion and sediment control/stormwater plan.

Preconstruction Meeting

Furnish the names of the Certified Erosion and Sediment Control/Stormwater Supervisor, Certified Foremen, Certified Installers and Certified Designer and notify the Engineer of changes in certified personnel over the life of the contract within 2 days of change.

Ethical Responsibility

Any company performing work for the North Carolina Department of Transportation has the ethical responsibility to fully disclose any reprimand or dismissal of an employee resulting from improper testing or falsification of records.

Revocation or Suspension of Certification

Upon recommendation of the Chief Engineer to the certification entity, certification for Supervisor, Certified Foremen, Certified Installers and Certified Designer may be revoked or suspended with the issuance of an Immediate Corrective Action (ICA), Notice of Violation (NOV), or Cease and Desist Order for erosion and sediment control/stormwater related issues.

The Chief Engineer may recommend suspension or permanent revocation of certification due to the following:

Failure to adequately perform the duties as defined within this certification provision. Issuance of an ICA, NOV, or Cease and Desist Order. (A)

(B) (C) Failure to fully perform environmental commitments as detailed within the permit conditions and specifications.

Demonstration of erroneous documentation or reporting techniques.

Cheating or copying another candidate's work on an examination.

Intentional falsification of records.

Directing a subordinate under direct or indirect supervision to perform any of the above

(H) Dismissal from a company for any of the above reasons.

Suspension or revocation of one's certification by another entity.

Suspension or revocation of a certification will be sent by certified mail to the certificant and the Corporate Head of the company that employs the certificant.

A certificant has the right to appeal any adverse action which results in suspension or permanent revocation of certification by responding, in writing, to the Chief Engineer within 10 calendar days after receiving notice of the proposed adverse action.

> Chief Engineer 1536 Mail Service Center Raleigh, NC 27699-1536

Failure to appeal within 10 calendar days will result in the proposed adverse action becoming effective on the date specified on the certified notice. Failure to appeal within the time specified will result in a waiver of all future appeal rights regarding the adverse action taken. The certificant will not be allowed to perform duties associated with the certification during the appeal process.

The Chief Engineer will hear the appeal and make a decision within 7 days of hearing the appeal. Decision of the Chief Engineer will be final and will be made in writing to the certificant.

If a certification is temporarily suspended, the certificant shall pass any applicable written examination and any proficiency examination, at the conclusion of the specified suspension period, prior to having the certification reinstated.

Measurement and Payment

Certified Erosion and Sediment Control/Stormwater Supervisor, Certified Foremen, Certified Installers and Certified Designer will be incidental to the project for which no direct compensation will be made.

Guidance on Complying with the Applicable Requirements of NCG01

In a memorandum dated July 14, 2008, the North Carolina Division of Water Quality (NCDWQ) informed the North Carolina Department of Transportation (NCDOT) of the requirements applicable to their activities covered under the NCG0 1 general permit. The purpose of this document is to provide guidance on complying with the applicable requirements of the NCG0 1. This document will provide definitions of terms, specific details on monitoring and recordkeeping, and recommendations to maintain compliance with the NCG0 1. This guidance is applicable only to the current NCG01 general permit. Should revisions be made to the NCG01 general permit when it is renewed, a new guidance document will be issued reflecting those revisions.

Definitions

303(d) listed stream – Streams listed on the 303(d) impaired waters list are required to be inspected twice a week. This requirement applies only to streams listed for pollutants associated with construction activities such as turbidity, sediment, or biological integrity and included on DWQ's Construction 3 03(d) list. Unnamed tributaries draining to the impaired stream reach are assumed to carry the 303(d) listing as well.

Idle projects – Idle projects are projects that have not been completed but where no construction activity occurs for 21 calendar days or more and have been adequately stabilized with temporary vegetation pursuant to Division of Land Resources guidelines. Typically, these projects are two-part projects (grading and paving) with significant gaps between activities or where the project has been stabilized with temporary ground cover and construction has been halted due to weather, funding, or other constraints.

Pollutants for visual inspection

Clarity – Clarity refers to the clarity of the stormwater discharge and can range from clear to opaque or very cloudy.

Floating Solids – Floating solids are any solids, foams, or debris observed floating on the surface of the stormwater discharge.

Suspended Solids – Suspended solids is the type of pollution most often associated with construction activities. This term refers to suspended sediment or other particles in the discharge. This also includes sediment that was once suspended and has been deposited outside the limits of the work site.

Oil Sheen – Oil sheen refers to the shiny or colored luster that result from petrochemicals in the discharge.

Other Obvious Indicators of Stormwater Pollution – This could be anything not listed above such as de-icing material, slag, industrial pollutants, etc.

Stormwater Discharge Outfall (SDO) – A SDO is defined as a point of stormwater discharge to waters of the State (streams, wetlands, open water). An outfall is not restricted to pipes and includes any type of conveyance or any discharge from a BMP that discharges to waters of the State.

Monitoring and Recordkeeping

All SDOs shall be inspected once every seven calendar days [twice every seven calendar days for 303(d) listed streams (see definition above)] or within 24 hours after a 0.5" rainfall per 24 hour period. It is recommended that outfalls or discharges from BMPs not discharging to waters of the State be monitored and maintained regularly. This is highly recommended for discharges located adjacent to sensitive areas such as adjacent landowners or those that are in close proximity to waters of the State.

SDOs on idle projects (See definition above) may be inspected less frequently. The inspection frequency shall not be less than once every 14 calendar days (once every seven calendar days for 3 03(d) listed streams). However, SDOs on inactive projects must be inspected within 24 hours after a 0.5" rainfall per 24 hour period.

Inspections of SDOs shall include observing the discharge from the outfall if there is discharge present and making a qualitative assessment of the discharge for clarity, floating solids, suspended solids, oil sheen, and other obvious indicators of stormwater pollution. Qualitative assessment of the discharge includes visually observing the outfall at a point just prior to discharging to waters of the State for the parameters listed above. The qualitative assessment shall be made before the discharge

joins or is diluted by any other waste stream, body of water, or substance. Samples of the discharge at the SDO are not required.

Results of the inspections shall be recorded for each SDO. NCDWQ has provided a recommended method on its website for qualitatively assessing the discharge using a numerical scale. However, NCDOT may develop and submit to NCDWQ for approval, its own method for qualitatively assessing the discharge. The method should clearly describe the range of values, should be comparable to NCDWQ's recommended method, and should be used consistently in all of the NCDOT Division Offices.

If visible sedimentation is leaving NCDOT property, regardless of whether it is from a SDO or not, corrective actions shall be taken to control the discharge of sediments outside of NCDOT's property. Events where sediment leaves the NCDOT property limits shall be documented in the records along with the corrective actions taken and when the situation was resolved. Any event where sediment leaves the NCDOT property limits or where pollutants are discharged to waters of the State shall be reported to the appropriate offices of NCDWQ and NCDLR within 24 hours of first knowledge of the occurrence. NCDWQ shall be consulted regarding appropriate clean-up techniques for any loss of pollutants to waters of the State or protected buffer areas.

Rainfall shall be monitored and recorded everyday. A rain gage shall be maintained on each construction site. It is recommended that at least one rain gage per 3 miles of roadway be maintained on each site unless topographical conditions (e.g., mountains) necessitate more gages. The State Climate Office of North Carolina Multi-sensor Precipitation Estimate (MPE) or other approved remote sensing precipitation tools may be substituted for rain gages and used to monitor daily rainfall and to trigger inspections due to a 0.5" or greater rainfall event.

At a minimum, inspection records shall include the following:

- Daily rainfall amounts (record zero if no rain fell), identification of each discharge outfall
 inspected, date and time of the inspection, name and signature of the person performing the
 inspection, indication of characteristics of the stormwater discharge (clarity, floating solids,
 suspended solids, oil sheen, etc.), description of other indicators of stormwater pollution,
 indication of visible sediment leaving the NCDOT property limits or entering waters of the
 State, actions taken to correct/prevent sedimentation outside the NCDOT property limits or
 in waters of the State, and when the action was completed.
- For visible sedimentation found outside the NCDOT property limits, inspection records must include an explanation as to the actions taken to control future releases, actions taken to clean up the sediment that has left the NCDOT property limits, and when the action was completed.

The contractor shall be responsible for maintaining the NPDES Stormwater Inspections form (SPPPFORM30). This form can be downloaded from:

https://apps.dot.state.nc.us/quickfind/forms/Default.aspx

Inspection(s) shall be made in the presence of NCDOT personnel, and signed off by the contractor's representative and the NCDOT representative once the inspection process has been performed.

MATERIALS

(2-21-12) (Rev. 10-15-13)

1000, 1005, 1050, 1074, 1078, 1080, 1081, 1084, 1087, 1092

SP10 R01

Revise the 2012 Standard Specifications as follows:

Page 10-1, Article 1000-1, DESCRIPTION, line 14, add the following:

Use materials which do not produce a mottled appearance through rusting or other staining of the finished concrete surface.

Page 10-5, Table 1000-1, REQUIREMENTS FOR CONCRETE, replace with the following:

TABLE 1000-1 REQUIREMENTS FOR CONCRETE												
of te th th ys		Maxi	mum Wate	er-Cement	Ratio		sistency . Slump		Cement Content			
Class of Concrete	Min. Comp. Strength at 28 days	Air-En			Non Air-Entrained Concrete		Non- Vibrate d	Vib	rated	Non- V	ibrated	
ចដូ	Min St at	Rounded Aggregate	Angular Aggre-gate	Rounded Aggregate	Angular Aggre-gate	Vibrate d	N div	Min.	Max.	Min.	Max.	
Units	psi					inch	inch	lb/cy	lb/cy	lb/cy	lb/cy	
AA	4,500	0.381	0.426	-	-	3.5	-	639	715	-	-	
AA Slip Form	4,500	0.381	0.426	-	-	1.5	-	639	715	-	-	
Drilled Pier	4,500	-	-	0.450	0.450	-	5-7 dry 7-9 wet	-	-	640	800	
Α	3,000	0.488	0.532	0.550	0.594	3.5	4	564	-	602	-	
В	2,500	0.488	0.567	0.559	0.630	2.5	4	508	-	545	-	
B Slip Formed	2,500	0.488	0.567	-	-	1.5	-	508	-	-	-	
Sand Light- weight	4,500	-	0.420	-	-	4	-	715	-	-	-	
Latex Modified	3,000 7 day	0.400	0.400	-	-	6	-	658	-	-	-	
Flowable Fill excavatable	150 max. at 56 days	as needed	as needed	as needed	as needed	-	Flow-able	-	-	40	100	
Flowable Fill non-excavatable	125	as needed	as needed	as needed	as needed	-	Flow-able	-	-	100	as needed	
Pavement	4,500 design, field 650 flexural, design only	0.559	0.559	-	-	1.5 slip form 3.0 hand place	-	526	-	-	-	
Precast	See Table 1077-1	as needed	as needed	-	-	6	as needed	as needed	as needed	as needed	as needed	
Prestress	per contract	See Table 1078-1	See Table 1078-1	-	-	8	-	564	as needed	-	-	

Page 10-65, Article 1050-1, GENERAL, line 41, replace the first sentence with:

All fencing material and accessories shall meet Section 106.

Page 10-23, Table 1005-1, AGGREGATE GRADATION-COARSE AGGREGATE, replace with the following:

	Light-c weight	ABC (M)	ABC	9	14M	78M	67	6M	57M	57	5	467M	4	Std. Size #		
C. B. S.		ı	,	1		1	ı	1		1	1	100	100	2		
e Suba e Suba or Light		100	100	ı		ı	ı		100	100	100	95- 100	90- 100	1/2"		
article 1 article 1 weight /	ı	75- 100	75- 97	ı		ı	100	100	95- 100	95- 100	90-	ı	20- 55	7		AGG
See Subarticle 1005-4(A). See Subarticle 1005-4(B). For Lightweight Aggregate	ı	ı	ı	ı		100	90-	90-	ı	ı	20- 55	35- 70	0- 15	3/4"	Per	AGGREGATE
3). ate use	100	45- 79	55- 80	ı		98- 100	ı	20- 55	25- 45	25- 60	0-	ı	ı	1/2"	centa	ATE (
d in Stru	80- 100	ı	ı	100	100	75- 100	20- 55	0- 20	ı		0-5	30	0-5	3/8"	Percentage of Total by Weight Passing	3RAD
uctural (5- 40	20- 40	35- 55	85- 100	35- 70	20- 45	0- 10	0-8	0- 10	10 10	ı	0-5	ı	#4	Tota	ABLE
Concret	0- 20	ı	ı	10- 40	5- 20	0- 15	0-5	ı	0-5	0-5	ı	ı	ı	#8	l by \	100:
e, see		0- 25	25- 45	ı		ı		ı	ı	•	ı	ı	ı	#10	Veigh	5-1 OAR
Subarti	10	ı	ı	0- 10	0-8	ı		ı	ı	•	ı	ı	ı	#16	nt Pas	SE AC
cle 101		ı	14- 30	ı		ı		ı	ı	•	ı	ı	ı	#40	sing)GRE
See Subarticle 1005-4(A). See Subarticle 1005-4(B). For Lightweight Aggregate used in Structural Concrete, see Subarticle 1014-2(E)(6).	0- 2.5	0- 12 ^B	4- 12 ^B	Þ	>	Þ	>	>	Þ	>	>	A	A	#20 0		TABLE 1005-1 GRADATION - COARSE AGGREGATE
3).	AST	Maintenance Stabilization	Aggregate Base Course, Aggregate Stabilization	AST	Asphalt Plant Mix, AST, Weep Hole Drains, Str. Concrete	Asphalt Plant Mix, AST, Str. Conc, Weep Hole Drains	AST, Str. Concrete, Asphalt Plant Mix	AST	AST, Concrete Pavement	AST, Str. Concrete, Shoulder Drain, Sediment Control Stone	AST, Sediment Control Stone	Asphalt Plant Mix	Asphalt Plant Mix	Remarks		111

Page 10-115, Subarticle 1074-7(B), Gray Iron Castings, lines 10-11, replace with the first two sentences with the following:

Supply gray iron castings meeting all facets of AASHTO M 306 excluding proof load. Proof load testing will only be required for new casting designs during the design process, and conformance to M306 loading (40,000 lbs.) will be required only when noted on the design documents.

Page 10-126, Table 1078-1, REQUIREMENTS FOR CONCRETE, replace with the following:

TABLE 1078-1 REQUIREMENTS FOR CONCRETE					
Property	28 Day Design Compressive Strength 6,000 psi or less	28 Day Design Compressive Strength greater than 6,000 psi			
Maximum Water/Cementitious Material Ratio	0.45	0.40			
Maximum Slump without HRWR	3.5"	3.5"			
Maximum Slump with HRWR	8"	8"			
Air Content (upon discharge into forms)	5 + 2%	5 + 2%			

Page 10-151, Article 1080-4 Inspection and Sampling, lines 18-22, replace (B), (C) and (D) with the following:

- (B) At least 3 panels prepared as specified in 5.5.10 of AASHTO M 300, Bullet Hole Immersion Test.
- (C) At least 3 panels of 4"x6"x1/4" for the Elcometer Adhesion Pull Off Test, ASTM D4541.
- (D) A certified test report from an approved independent testing laboratory for the Salt Fog Resistance Test, Cyclic Weathering Resistance Test, and Bullet Hole Immersion Test as specified in AASHTO M 300.
- (E) A certified test report from an approved independent testing laboratory that the product has been tested for slip coefficient and meets AASHTO M253, Class B.

Page 10-162, Subarticle 1081-1(A) Classifications, lines 4-7, delete the second and third sentences of the description for Type 3A.

Page 10-162, Subarticle 1081-1(B) Requirements, lines 26-30, replace the second paragraph with the following:

For epoxy resin systems used for embedding dowel bars, threaded rods, rebar, anchor bolts and other fixtures in hardened concrete, the manufacturer shall submit test results showing that the bonding system will obtain 125% of the specified required yield strength of the fixture. Furnish certification that, for the particular bolt grade, diameter and embedment depth required, the anchor system will not fail by adhesive failure and that there is no movement of the anchor bolt. For certification and anchorage, use 3,000 psi as the minimum Portland cement concrete compressive strength used in this test. Use adhesives that meet Section 1081.

List the properties of the adhesive on the container and include density, minimum and maximum temperature application, setting time, shelf life, pot life, shear strength and compressive strength.

Page 10-169, Subarticle 1081-3(G) Anchor Bolt Adhesives, delete this subarticle.

Page 10-173, Article 1084-2 STEEL SHEET PILES, lines 37-38, replace first paragraph with the following:

Steel sheet piles detailed for permanent applications shall be hot rolled and meet ASTM A572 or ASTM A690 unless otherwise required by the plans. Steel sheet piles shall be coated as required by the plans. Galvanized sheet piles shall be coated in accordance with Section 1076. Metallized sheet piles shall be metallized in accordance to the Project Special Provision "Thermal Sprayed Coatings (Metallization)" with an 8 mil, 99.9% aluminum alloy coating and a 0.5 mil seal coating. Any portion of the metallized sheet piling encased in concrete shall receive a barrier coat. The barrier coat shall be an approved waterborne coating with a low-viscosity which readily absorbs into the pores of the aluminum thermal sprayed coating. The waterborne coating shall be applied at a spreading rate that results in a theoretical 1.5 mil dry film thickness. The manufacturer shall issue a letter of certification that the resin chemistry of the waterborne coating is compatible with the 99.9% aluminum thermal sprayed alloy and suitable for tidal water applications.

Page 10-179, Subarticle 1087-4(A) Composition, lines 39-41, replace the third paragraph with the following:

All intermixed and drop-on glass beads shall not contain more than 75 ppm arsenic or 200 ppm lead.

Page 10-180, Subarticle 1087-4(B) Physical Characteristics, line 8, replace the second paragraph with the following:

All intermixed and drop-on glass beads shall comply with NCGS § 136-30.2 and 23 USC § 109(r).

Page 10-181, Subarticle 1087-7(A) Intermixed and Drop-on Glass Beads, line 24, add the following after the first paragraph:

Use X-ray Fluorescence for the normal sampling procedure for intermixed and drop-on beads, without crushing, to check for any levels of arsenic and lead. If any arsenic or lead is detected, the sample shall be crushed and repeat the test using X-ray Fluorescence. If the X-ray Fluorescence test shows more than a LOD of 5 ppm, test the beads using United States Environmental Protection Agency Method 6010B, 6010C or 3052 for no more than 75 ppm arsenic or 200 ppm lead.

Page 10-204, Subarticle 1092-2(A) Performance and Test Requirements, replace Table 1092-3 Minimum Coefficient of Retroreflection for NC Grade A with the following:

TABLE 1092-3 MINIMUM COEFFICIENT OF RETROREFLECTION FOR NC GRADE A (Candelas Per Lux Per Square Meter)								
Observation Angle, degrees	Entrance Angle, degrees	White	Yellow	Green	Red	Blue	Fluorescent Yellow Green	Fluorescent Yellow
0.2	-4.0	525	395	52	95	30	420	315
0.2	30.0	215	162	22	43	10	170	130
0.5	-4.0	310	230	31	56	18	245	185
0.5	30.0	135	100	14	27	6	110	81
1.0	-4.0	120	60	8	16	3.6	64	48
1.0	30.0	45	34	4.5	9	2	36	27

AWARD OF CONTRACT

The basis for award of this contract will be determined by multiplying the unit bid prices by the quantities given and comparing the total amount bid for the following items:

Mobilization
Comprehensive Grading
Foundation Conditioning Material
18" RC Pipe Culvert, Class III
Pipe Removal
Incidental Stone
Shoulder Borrow
Milling Asphalt Pavement, 0" to 1.0"
ACBC Type B 25.0 B
ACIC Type I 19.0 B
ACSC Type SF 9.5 A
Asphalt Binder, PG 64-22
Thermoplastic Pavement Marking Line (4" – White – 90 mils)
Thermoplastic Pavement Marking Line (4" – White – 120 mils)
Thermoplastic Pavement Marking Line (4" – Yellow – 120 mils)
Thermoplastic Pavement Marking Line (8" – Yellow – 90 mils)
Thermoplastic Pavement Marking Line (4" – White – 90 mils)
Thermoplastic Pavement Marking Line (4" – White – 90 mils)

Seeding and Mulching (Permanent)

All other items are listed for contingent bids. The Contractor may be required to furnish and install these items if it is determined by the Engineer to be necessary. NOTE: Bids are required on all contingent items. Any proposals which do not have a bid for contingent items will be considered non-responsive and will not be considered for award of contract.

The quantities listed are for bidding purposes only. The actual quantities will be determined by the Engineer.

"The North Carolina Department of Transportation, in accordance with the provisions of *Title VI of the Civil Rights Act of 1964* (78 Stat. 252) and the Regulations of the Department of Transportation (49 C.F.R., Part 21), issued pursuant to such act, hereby notifies all bidders that it will affirmatively insure that the contract entered into pursuant to this advertisement will be awarded to the lowest responsible bidder without discrimination on the ground of race, color, or national origin".

DIVISION CONTRACT Standard Special Provisions

NCDOT GENERAL SEED SPECIFICATION FOR SEED QUALITY

Seed shall be sampled and tested by the North Carolina Department of Agriculture and Consumer Services, Seed Testing Laboratory. When said samples are collected, the vendor shall supply an independent laboratory report for each lot to be tested. Results from seed so sampled shall be final. Seed not meeting the specifications shall be rejected by the Department of Transportation and shall not be delivered to North Carolina Department of Transportation warehouses. If seed has been delivered it shall be available for pickup and replacement at the supplier's expense.

Any re-labeling required by the North Carolina Department of Agriculture and Consumer Services, Seed Testing Laboratory, that would cause the label to reflect as otherwise specified herein shall be rejected by the North Carolina Department of Transportation.

Seed shall be free from seeds of the noxious weeds Johnsongrass, Balloonvine, Jimsonweed, Witchweed, Itchgrass, Serrated Tussock, Showy Crotalaria, Smooth Crotalaria, Sicklepod, Sandbur, Wild Onion, and Wild Garlic. Seed shall not be labeled with the above weed species on the seed analysis label. Tolerances as applied by the Association of Official Seed Analysts will NOT be allowed for the above noxious weeds except for Wild Onion and Wild Garlic.

Tolerances established by the Association of Official Seed Analysts will generally be recognized. However, for the purpose of figuring pure live seed, the <u>found</u> pure seed and <u>found</u> germination percentages as reported by the North Carolina Department of Agriculture and Consumer Services, Seed Testing Laboratory will be used. Allowances, as established by the NCDOT, will be recognized for minimum pure live seed as listed on the following pages.

The specifications for restricted noxious weed seed refers to the number per pound as follows:

Restricted Noxious Weed	Limitations per Lb. Of Seed	Restricted Noxious Weed	Limitations per Lb. of Seed	
Blessed Thistle	4 seeds	Cornflower (Ragged Robin)	27 seeds	
Cocklebur	4 seeds	Texas Panicum	27 seeds	
Spurred Anoda	4 seeds	Bracted Plantain	54 seeds	
Velvetleaf	4 seeds	Buckhorn Plantain	54 seeds	
Morning-glory	8 seeds	Broadleaf Dock	54 seeds	
Corn Cockle	10 seeds	Curly Dock	54 seeds	
Wild Radish	12 seeds	Dodder	54 seeds	
Purple Nutsedge	27 seeds	Giant Foxtail	54 seeds	
Yellow Nutsedge	27 seeds	Horsenettle	54 seeds	
Canada Thistle	27 seeds	Quackgrass	54 seeds	
Field Bindweed	27 seeds	Wild Mustard	54 seeds	
Hedge Bindweed	27 seeds			

Seed of Pensacola Bahiagrass shall not contain more than 7% inert matter, Kentucky Bluegrass, Centipede and Fine or Hard Fescue shall not contain more than 5% inert matter whereas a maximum of 2% inert matter will be allowed on all other kinds of seed. In addition, all seed shall not contain more than 2% other crop seed nor more than 1% total weed seed. The germination rate as tested by the North Carolina Department of Agriculture shall not fall below 70%, which includes both dormant and hard seed. Seed shall be labeled with not more than 7%, 5% or 2% inert matter (according to above specifications), 2% other crop seed and 1% total weed seed.

Exceptions may be made for minimum pure live seed allowances when cases of seed variety shortages are verified. Pure live seed percentages will be applied in a verified shortage situation. Those purchase orders of deficient seed lots will be credited with the percentage that the seed is deficient.

FURTHER SPECIFICATIONS FOR EACH SEED GROUP ARE GIVEN BELOW:

Minimum 85% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 restricted noxious weed seed per pound. Seed less than 83% pure live seed will not be approved.

Sericea Lespedeza Oats (seeds)

Minimum 80% pure live seed; maximum 1% total weed seed; maximum 2% total other crop; maximum 144 restricted noxious weed seed per pound. Seed less than 78% pure live seed will not be approved.

Tall Fescue (all approved varieties)
Kobe Lespedeza
Korean Lespedeza
Weeping Lovegrass
Carpetgrass

Bermudagrass Browntop Millet German Millet – Strain R Clover – Red/White/Crimson

Minimum 78% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 restricted noxious weed seed per pound. Seed less than 76% pure live seed will not be approved.

Common or Sweet Sundangrass

Minimum 76% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 restricted noxious weed seed per pound. Seed less than 74% pure live seed will not be approved.

Rye (grain; all varieties)
Kentucky Bluegrass (all approved varieties)
Hard Fescue (all approved varieties)
Shrub (bicolor) Lespedeza

Minimum 70% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 noxious weed seed per pound. Seed less than 70% pure live seed will not be approved.

Centipedegrass Crownvetch Pensacola Bahiagrass Creeping Red Fescue Japanese Millet Reed Canary Grass Zoysia

Minimum 70% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 5% inert matter; maximum 144 restricted noxious weed seed per pound.

Barnyard Grass Sweet Clover Big Bluestem Little Bluestem Bristly Locust Birdsfoot Trefoil Indiangrass Orchardgrass Switchgrass Yellow Blossom Sweet Clover

ERRATA

(1-17-12) (Rev. 10-15-13) Z-4

Revise the 2012 Standard Specifications as follows:

Division 2

Page 2-7, line 31, Article 215-2 Construction Methods, replace "Article 107-26" with "Article 107-

Page 2-17, Article 226-3, Measurement and Payment, line 2, delete "pipe culverts,".

Page 2-20, Subarticle 230-4(B), Contractor Furnished Sources, change references as follows:

Line 1, replace "(4) Buffer Zone" with "(c) Buffer Zone"; Line 12, replace "(5) Evaluation for Potential Wetlands and Endangered Species" with "(d) Evaluation for Potential Wetlands and Endangered Species"; and Line 33, replace "(6) Approval" with "(4) Approval".

Division 4

Page 4-77, line 27, Subarticle 452-3(C) Concrete Coping, replace "sheet pile" "reinforcement".

Division 6

Page 6-7, line 31, Article 609-3 Field Verification of Mixture and Job Mix Formula Adjustments, replace "30" with "45".

Page 6-10, 42, **Subarticle** 609-6(C)(2), replace "Subarticle 609-6(E)" with "Subarticle 609-6(D)".

Page 6-11, Table 609-1 Control Limits, replace "Max. Spec. Limit" for the Target Source of $P_{0.075}/P_{be}$ Ratio with "1.0".

Page 6-40. Article 650-2 Materials. 1012-1(F)" replace "Subarticle with "Subarticle 1012-1(E)"

Division 8

Page 8-23, line 10, Article 838-2 Materials, replace "Portland Cement Concrete, Class B" with "Portland Cement Concrete, Class A".

Division 10

Page 10-74, Table 1056-1 Geotextile Requirements, replace "50%" for the UV Stability (Retained Strength) of Type 5 geotextiles with "70%".

Division 12

Page 12-7, Table 1205-3, add "FOR THERMOPLASTIC" to the end of the title.

Page 12-8, Subarticle 1205-5(B), line 13, replace "Table 1205-2" with "Table 1205-4".

Page 12-8, Table 1205-4 and 1205-5, replace "THERMOPLASTIC" in the title of these tables with "PŎLYURÉA"

Page 12-9, Subarticle 1205-6(B), line 21, replace "Table 1205-4" with "Table 1205-6".

Page 12-11, Subarticle 1205-8(C), line 25, replace "Table 1205-5" with "Table 1205-7".

Division 15

Page 15-4, Subarticle 1505-3(F) Backfilling, line 26, replace "Subarticle 235-4(C)" with "Subarticle 235-3(C)"

Page 15-6, Subarticle 1510-3(B), after line 21, replace the allowable leakage formula with the

following: $W = LD\sqrt{P} \div 148,000$ Page 15-6, Subarticle 1510-3(B), line 32, delete "may be performed concurrently or" and replace with "shall be performed".

Page 15-17, Subarticle 1540-3(E), line 27, delete "Type 1".

Division 17

Page 17-26, line 42, Subarticle 1731-3(D) Termination and Splicing within Interconnect Center, delete this subarticle.

Revise the 2012 Roadway Standard Drawings as follows:

1633.01 Sheet 1 of 1, English Standard Drawing for Matting Installation, replace "1633.01" with "1631.01".

PLANT AND PEST QUARANTINES

(Imported Fire Ant, Gypsy Moth, Witchweed, And Other Noxious Weeds)

(3-18-03) (Rev. 10-15-13) Z-04a

Within Quarantined Area

This project may be within a county regulated for plant and/or pests. If the project or any part of the Contractor's operations is located within a quarantined area, thoroughly clean all equipment prior to moving out of the quarantined area. Comply with federal/state regulations by obtaining a certificate or limited permit for any regulated article moving from the quarantined area.

Originating in a Quarantined County

Obtain a certificate or limited permit issued by the N.C. Department of Agriculture/United States Department of Agriculture. Have the certificate or limited permit accompany the article when it arrives at the project site.

Contact

Contact the N.C. Department of Agriculture/United States Department of Agriculture at 1-800-206-9333, 919-733-6932, or http://www.ncagr.gov/plantind/ to determine those specific project sites located in the quarantined area or for any regulated article used on this project originating in a quarantined county.

Regulated Articles Include

- 1. Soil, sand, gravel, compost, peat, humus, muck, and decomposed manure, separately or with other articles. This includes movement of articles listed above that may be associated with cut/waste, ditch pulling, and shoulder cutting.
- Plants with roots including grass sod.
- 3. Plant crowns and roots.
- 4. Bulbs, corms, rhizomes, and tubers of ornamental plants.
- 5. Hay, straw, fodder, and plant litter of any kind.
- 6. Clearing and grubbing debris.
- 7. Used agricultural cultivating and harvesting equipment.
- 8. Used earth-moving equipment.
- 9. Any other products, articles, or means of conveyance, of any character, if determined by an inspector to present a hazard of spreading imported fire ant, gypsy moth, witchweed or other noxious weeds.

MINIMUM WAGES

(7-21-09)Z-5

FEDERAL: The Fair Labor Standards Act provides that with certain exceptions every employer shall pay wages at the rate of not less than SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

STATE:

The North Carolina Minimum Wage Act provides that every employer shall pay to each of his employees, wages at a rate of not less than SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

The minimum wage paid to all skilled labor employed on this contract shall be SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

The minimum wage paid to all intermediate labor employed on this contract shall be SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

The minimum wage paid to all unskilled labor on this contract shall be SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

This determination of the intent of the application of this act to the contract on this project is the responsibility of the Contractor.

The Contractor shall have no claim against the Department of Transportation for any changes in the minimum wage laws, Federal or State. It is the responsibility of the Contractor to keep fully informed of all Federal and State Laws affecting his contract.

MINORITY BUSINESS ENTERPRISE AND WOMEN BUSINESS ENTERPRISE (DIVISIONS)

Description

The purpose of this Special Provision is to carry out the North Carolina Department of Transportation's policy of ensuring nondiscrimination in the award and administration of contracts financed in whole or in part with State funds.

Definitions

Additional MBE/WBE Subcontractors - Any MBE/WBE submitted at the time of bid that will <u>not</u> be used to meet either the MBE or WBE goal. No submittal of a Letter of Intent is required.

Committed MBE/WBE Subcontractor - Any MBE/WBE submitted at the time of bid that is being used to meet either the MBE or WBE goal by submission of a Letter of Intent. Or any MBE or WBE used as a replacement for a previously committed MBE or WBE firm.

Contract Goals Requirement - The approved MBE and WBE participation at time of award, but not greater than the advertised contract goals for each.

Goal Confirmation Letter - Written documentation from the Department to the bidder confirming the Contractor's approved, committed MBE and WBE participation along with a listing of the committed MBE and WBE firms.

Manufacturer - A firm that operates or maintains a factory or establishment that produces on the premises, the materials or supplies obtained by the Contractor.

MBE Goal - A portion of the total contract, expressed as a percentage, that is to be performed by committed MBE subcontractor(s).

Minority Business Enterprise (MBE) - A firm certified as a Disadvantaged Minority-Owned Business Enterprise through the North Carolina Unified Certification Program.

Regular Dealer - A firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials or supplies required for the performance of the contract are bought, kept in stock, and regularly sold to the public in the usual course of business. A regular dealer engages in, as its principal business and in its own name, the purchase and sale or lease of the products in question. A regular dealer in such bulk items as steel, cement, gravel, stone, and petroleum products need not keep such products in stock, if it owns and operates distribution equipment for the products. Brokers and packagers are not regarded as manufacturers or regular dealers within the meaning of this section.

North Carolina Unified Certification Program (NCUCP) - A program that provides comprehensive services and information to applicants for MBE/WBE certification. The MBE/WBE program follows the same regulations as the federal Disadvantaged Business Enterprise (DBE) program in accordance with 49 CFR Part 26.

United States Department of Transportation (USDOT) - Federal agency responsible for issuing regulations (49 CFR Part 26) and official guidance for the DBE program.

WBE Goal - A portion of the total contract, expressed as a percentage, that is to be performed by committed WBE subcontractor(s).

Women Business Enterprise (WBE) - A firm certified as a Disadvantaged Women-Owned Business Enterprise through the North Carolina Unified Certification Program.

Forms and Websites Referenced in this Provision

Payment Tracking System - On-line system in which the Contractor enters the payments made to MBE and WBE subcontractors who have performed work on the project. https://apps.dot.state.nc.us/Vendor/PaymentTracking/

DBE-IS Subcontractor Payment Information - Form for reporting the payments made to all MBE/WBE firms working on the project. This form is for paper bid projects only. http://www.ncdot.org/doh/forms/files/DBE-IS.xls

RF-1 *MBE/WBE Replacement Request Form* - Form for replacing a committed MBE or WBE. http://connect.ncdot.gov/projects/construction/Construction%20Forms/DBE%20MBE%20WBE%20Replacement%20Request%20Form.pdf

SAF Subcontract Approval Form - Form required for approval to sublet the contract. http://connect.ncdot.gov/projects/construction/Construction%20Forms/Subcontract%20Approval%20Form%20Rev.%202012.zip

JC-1 Joint Check Notification Form - Form and procedures for joint check notification. The form acts as a written joint check agreement among the parties providing full and prompt disclosure of the expected use of joint checks.

http://connect.ncdot.gov/projects/construction/Construction%20Forms/Joint%20Check%20Notification%20Form.pdf

Letter of Intent - Form signed by the Contractor and the MBE/WBE subcontractor, manufacturer or regular dealer that affirms that a portion of said contract is going to be performed by the signed MBE/WBE for the amount listed at the time of bid.

http://connect.ncdot.gov/letting/LetCentral/Letter%20of%20Intent%20to%20Perform%20as%20a%20Subcontractor.pdf

Listing of MBE and WBE Subcontractors Form - Form for entering MBE/WBE subcontractors on a project that will meet this MBE and WBE goals. This form is for paper bids only. http://connect.ncdot.gov/municipalities/Bid%20Proposals%20for%20LGA%20Content/09%20MBE-WBE%20Subcontractors%20(State).doc

Subcontractor Quote Comparison Sheet - Spreadsheet for showing all subcontractor quotes in the work areas where MBEs and WBEs quoted on the project. This sheet is submitted with good faith effort packages.

http://connect.ncdot.gov/business/SmallBusiness/Documents/DBE%20Subcontractor%20Quote%20Comparison%20Example.xls

MBE and WBE Goal

The following goals for participation by Minority Business Enterprises and Women Business Enterprises are established for this contract:

- (A) Minority Business Enterprises [3]%
 - (1) If the MBE goal is more than zero, the Contractor shall exercise all necessary and reasonable steps to ensure that MBEs participate in at least the percent of the contract as set forth above as the MBE goal.
 - (2) If the MBE goal is zero, the Contractor shall make an effort to recruit and use MBEs during the performance of the contract. Any MBE participation obtained shall be reported to the Department.
- (B) Women Business Enterprises [2]%
 - (1) If the WBE goal is more than zero, the Contractor shall exercise all necessary and reasonable steps to ensure that WBEs participate in at least the percent of the contract as set forth above as the WBE goal.
 - (2) If the WBE goal is zero, the Contractor shall make an effort to recruit and use WBEs during the performance of the contract. Any WBE participation obtained shall be reported to the Department.

Directory of Transportation Firms (Directory)

Real-time information is available about firms doing business with the Department and firms that are certified through NCUCP in the Directory of Transportation Firms. Only firms identified in the Directory as MBE and WBE certified shall be used to meet the MBE and WBE goals respectively. The Directory can be found at the following link. https://partner.ncdot.gov/VendorDirectory/default.html

The listing of an individual firm in the directory shall not be construed as an endorsement of the firm's capability to perform certain work.

Listing of MBE/WBE Subcontractors

At the time of bid, bidders shall submit <u>all</u> MBE and WBE participation that they anticipate to use during the life of the contract. Only those identified to meet the MBE goal and the WBE goal will be considered committed, even though the listing shall include both committed MBE/WBE subcontractors and additional MBE/WBE subcontractors. Any additional MBE/WBE subcontractor participation submitted at the time of bid will be used toward overall race-neutral goals. Only those firms with current MBE and WBE certification at the time of bid opening will be acceptable for listing in the bidder's submittal of MBE and WBE participation. The Contractor shall indicate the following required information:

Blank forms will not be deemed to represent zero participation. Bids submitted that do not have MBE and WBE participation indicated on the appropriate form will not be read publicly during the opening of bids. The Department will not consider these bids for award and the proposal will be rejected.

- (A) If either the MBE or WBE goal is more than zero,
 - (1) Bidders, at the time the bid proposal is submitted, shall submit a listing of MBE/WBE participation, including the names and addresses on *Listing of MBE and WBE Subcontractors* contained elsewhere in the contract documents in order for the bid to be considered responsive. Bidders shall indicate the total dollar value of the MBE and WBE participation for the contract.
 - (2) If bidders have no MBE or WBE participation, they shall indicate this on the *Listing of MBE and WBE Subcontractors* by entering the word "None" or the number "0." This form shall be completed in its entirety.
 - (3) The bidder shall be responsible for ensuring that the MBE/WBE is certified at the time of bid by checking the Directory of Transportation Firms. If the firm is not certified at the time of the bid-letting, that MBE's or WBE's participation will not count towards achieving the corresponding goal.
- (B) If either the MBE or WBE goal is zero, bidders, at the time the bid proposal is submitted, shall enter the word "None"; or the number "0"; or if there is participation, add the value on the Listing of MBE and WBE Subcontractors contained elsewhere in the contract documents.

MBE or WBE Prime Contractor

When a certified MBE or WBE firm bids on a contract that contains MBE and WBE goals, the firm is responsible for meeting the goals or making good faith efforts to meet the goals, just like any other bidder. In most cases, a MBE or WBE bidder on a contract will meet one of the goals by virtue of the work it performs on the contract with its own forces. However, all the work that is performed by the MBE or WBE bidder and any other similarly certified subcontractors will count toward the goal. The MBE or WBE bidder shall list itself along with any MBE or WBE subcontractors, if any, in order to receive credit toward the goals.

For example, on a proposed contract, the WBE goal is 10%, and the MBE goal is 8%. A WBE bidder puts in a bid where they will perform 40% of the contract work and have a WBE subcontractor which will perform another 5% of the work. Together the two WBE firms submit on the *Listing of MBE and*

WBE Subcontractors a value of 45% of the contract which fulfills the WBE goal. The 8% MBE goal shall be obtained through MBE participation with MBE certified subcontractors or documented through a good faith effort. It should be noted that you cannot combine the two goals to meet an overall value. The two goals shall remain separate.

MBE/WBE prime contractors shall also follow Sections A or B listed under *Listing of MBE/WBE Subcontractors* just as a non-MBE/WBE bidder would.

Written Documentation - Letter of Intent

The bidder shall submit written documentation for each MBE/WBE that will be used to meet the MBE and WBE goals of the contract, indicating the bidder's commitment to use the MBE/WBE in the contract. This documentation shall be submitted on the Department's form titled *Letter of Intent*.

The documentation shall be received in the office of the Engineer no later than 12:00 noon of the sixth calendar day following opening of bids, unless the sixth day falls on Saturday, Sunday or an official state holiday. In that situation, it is due in the office of the Engineer no later than 12:00 noon on the next official state business day.

If the bidder fails to submit the Letter of Intent from each committed MBE and WBE to be used toward the MBE and WBE goals, or if the form is incomplete (i.e. both signatures are not present), the MBE/WBE participation will not count toward meeting the MBE/WBE goal. If the lack of this participation drops the commitment below either the MBE or WBE goal, the Contractor shall submit evidence of good faith efforts for the goal not met, completed in its entirety, to the Engineer no later than 12:00 noon of the eighth calendar day following opening of bids, unless the eighth day falls on Saturday, Sunday or an official state holiday. In that situation, it is due in the office of the Engineer no later than 12:00 noon on the next official state business day.

Submission of Good Faith Effort

If the bidder fails to meet or exceed either the MBE or the WBE goal, the apparent lowest responsive bidder shall submit to the Department documentation of adequate good faith efforts made to reach that specific goal(s).

One complete set and (No. of Copies) copies of this information shall be received in the office of the Engineer no later than 12:00 noon of the sixth calendar day following opening of bids, unless the sixth day falls on Saturday, Sunday or an official state holiday. In that situation, it is due in the office of the Engineer no later than 12:00 noon on the next official state business day.

Note: Where the information submitted includes repetitious solicitation letters, it will be acceptable to submit a representative letter along with a distribution list of the firms that were solicited. Documentation of MBE/WBE quotations shall be a part of the good faith effort submittal. This documentation may include written subcontractor quotations, telephone log notations of verbal quotations, or other types of quotation documentation.

Consideration of Good Faith Effort for Projects with MBE/WBE Goals More Than Zero

Adequate good faith efforts mean that the bidder took all necessary and reasonable steps to achieve the goal which, by their scope, intensity, and appropriateness, could reasonably be expected to obtain sufficient MBE/WBE participation. Adequate good faith efforts also mean that the bidder actively and aggressively sought MBE/WBE participation. Mere *pro forma* efforts are not considered good faith efforts.

The Department will consider the quality, quantity, and intensity of the different kinds of efforts a bidder has made. Listed below are examples of the types of actions a bidder will take in making a good faith effort to meet the goals and are not intended to be exclusive or exhaustive, nor is it intended to be a mandatory checklist.

(A) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising, written notices, use of verifiable electronic means through the use of the NCDOT Directory of Transportation Firms) the interest of all certified MBEs/WBEs who have the capability to perform the work of the contract. The bidder must solicit this interest within at

least 10 days prior to bid opening to allow the MBEs/WBEs to respond to the solicitation. Solicitation shall provide the opportunity to MBEs/WBEs within the Division and surrounding Divisions where the project is located. The bidder must determine with certainty if the MBEs/WBEs are interested by taking appropriate steps to follow up initial solicitations.

- (B) Selecting portions of the work to be performed by MBEs/WBEs in order to increase the likelihood that the MBE and WBE goals will be achieved.
 - (1) Where appropriate, break out contract work items into economically feasible units to facilitate MBE/WBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces.
 - (2) Negotiate with subcontractors to assume part of the responsibility to meet the contract MBE/WBE goals when the work to be sublet includes potential for MBE/WBE participation (2nd and 3rd tier subcontractors).
- (C) Providing interested MBEs/WBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
- (D) (1) Negotiating in good faith with interested MBEs/WBEs. It is the bidder's responsibility to make a portion of the work available to MBE/WBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available MBE/WBE subcontractors and suppliers, so as to facilitate MBE/WBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of MBEs/WBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for MBEs/WBEs to perform the work.
 - (2) A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including MBE/WBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using MBEs/WBEs is not in itself sufficient reason for a bidder's failure to meet the contract MBE or WBE goals, as long as such costs are reasonable. Also, the ability or desire of a prime contractor to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidding contractors are not, however, required to accept higher quotes from MBEs/WBEs if the price difference is excessive or unreasonable.
- (E) Not rejecting MBEs/WBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associates and political or social affiliations (for example, union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
- (F) Making efforts to assist interested MBEs/WBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or bidder.
- (G) Making efforts to assist interested MBEs/WBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.
- (H) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; Federal, State, and local minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of MBEs/WBEs. Contact within 7 days from the bid opening NCDOT's Business Development Manager in the Business Opportunity and Work Force Development Unit to give notification of the bidder's inability to get MBE or WBE quotes.

(I) Any other evidence that the bidder submits which shows that the bidder has made reasonable good faith efforts to meet the MBE and WBE goal.

In addition, the Department may take into account the following:

- (1) Whether the bidder's documentation reflects a clear and realistic plan for achieving the MBE and WBE goals.
- (2) The bidders' past performance in meeting the MBE and WBE goals.
- (3) The performance of other bidders in meeting the MBE and WBE goals. For example, when the apparent successful bidder fails to meet the goals, but others meet it, you may reasonably raise the question of whether, with additional reasonable efforts the apparent successful bidder could have met the goals. If the apparent successful bidder fails to meet the MBE and WBE goals, but meets or exceeds the average MBE and WBE participation obtained by other bidders, the Department may view this, in conjunction with other factors, as evidence of the apparent successful bidder having made a good faith effort.

If the Department does not award the contract to the apparent lowest responsive bidder, the Department reserves the right to award the contract to the next lowest responsive bidder that can satisfy to the Department that the MBE and WBE goals can be met or that an adequate good faith effort has been made to meet the MBE and WBE goals.

Non-Good Faith Appeal

The Engineer will notify the contractor verbally and in writing of non-good faith. A contractor may appeal a determination of non-good faith made by the Goal Compliance Committee. If a contractor wishes to appeal the determination made by the Committee, they shall provide written notification to the Engineer. The appeal shall be made within 2 business days of notification of the determination of non-good faith.

Counting MBE/WBE Participation Toward Meeting MBE/WBE Goals

(A) Participation

The total dollar value of the participation by a committed MBE/WBE will be counted toward the contract goal requirements. The total dollar value of participation by a committed MBE/WBE will be based upon the value of work actually performed by the MBE/WBE and the actual payments to MBE/WBE firms by the Contractor.

(B) Joint Checks

Prior notification of joint check use shall be required when counting MBE/WBE participation for services or purchases that involves the use of a joint check. Notification shall be through submission of Form JC-1 (Joint Check Notification Form) and the use of joint checks shall be in accordance with the Department's Joint Check Procedures.

(C) Subcontracts (Non-Trucking)

A MBE/WBE may enter into subcontracts. Work that a MBE subcontracts to another MBE firm may be counted toward the MBE contract goal requirement. The same holds for work that a WBE subcontracts to another WBE firm. Work that a MBE subcontracts to a non-MBE firm does not count toward the MBE contract goal requirement. Again, the same holds true for the work that a WBE subcontracts to a non-WBE firm. If a MBE or WBE contractor or subcontractor subcontracts a significantly greater portion of the work of the contract than would be expected on the basis of standard industry practices, it shall be presumed that the MBE or WBE is not performing a commercially useful function. The MBE/WBE may present evidence to rebut this presumption to the Department. The Department's decision on the rebuttal of this presumption may be subject to review by the Office of Inspector General, NCDOT.

(D) Joint Venture

When a MBE or WBE performs as a participant in a joint venture, the Contractor may count toward its contract goal requirement a portion of the total value of participation with the MBE or WBE in the joint venture, that portion of the total dollar value being a distinct clearly defined portion of work that the MBE or WBE performs with its forces.

(E) Suppliers

A contractor may count toward its MBE or WBE requirement 60 percent of its expenditures for materials and supplies required to complete the contract and obtained from a MBE or WBE regular dealer and 100 percent of such expenditures from a MBE or WBE manufacturer.

(F) Manufacturers and Regular Dealers

A contractor may count toward its MBE or WBE requirement the following expenditures to MBE/WBE firms that are not manufacturers or regular dealers:

- (1) The fees or commissions charged by a MBE/WBE firm for providing a bona fide service, such as professional, technical, consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of a DOT-assisted contract, provided the fees or commissions are determined to be reasonable and not excessive as compared with fees and commissions customarily allowed for similar services.
- (2) With respect to materials or supplies purchased from a MBE/WBE, which is neither a manufacturer nor a regular dealer, count the entire amount of fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site (but not the cost of the materials and supplies themselves), provided the fees are determined to be reasonable and not excessive as compared with fees customarily allowed for similar services.

Commercially Useful Function

(A) MBE/WBE Utilization

The Contractor may count toward its contract goal requirement only expenditures to MBEs and WBEs that perform a commercially useful function in the work of a contract. A MBE/WBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the MBE/WBE shall also be responsible with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material and installing (where applicable) and paying for the material itself. To determine whether a MBE/WBE is performing a commercially useful function, the Department will evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing and the MBE/WBE credit claimed for its performance of the work, and any other relevant factors.

(B) MBE/WBE Utilization in Trucking

The following factors will be used to determine if a MBE or WBE trucking firm is performing a commercially useful function:

(1) The MBE/WBE shall be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract, and there shall not be a contrived arrangement for the purpose of meeting the MBE or WBE goal.

- (2) The MBE/WBE shall itself own and operate at least one fully licensed, insured, and operational truck used on the contract.
- (3) The MBE/WBE receives credit for the total value of the transportation services it provides on the contract using trucks it owns, insures, and operates using drivers it employs.
- (4) MBE The may subcontract the work to another MBE firm, including an owner-operator who is certified as a MBE. The same holds true that a WBE may subcontract the work to another WBE firm, including an owner-operator who is certified as a WBE. When this occurs, the MBE or WBE who subcontracts work receives credit for the total value of the transportation services the subcontracted MBE or WBE provides on the contract. It should be noted that every effort shall be made by MBE and WBE contractors to subcontract to the same certification (i.e., MBEs to MBEs and WBEs to WBEs), in order to fulfill the goal requirement. This, however, may not always be possible due to the limitation of firms in the area. If the MBE or WBE firm shows a good faith effort has been made to reach out to similarly certified transportation service providers and there is no interest or availability, and they can get assistance from other certified providers, the Engineer will not hold the prime liable for meeting the goal.
- (5) The MBE/WBE may also subcontract the work to a non-MBE/WBE firm, including from an owner-operator. The MBE/WBE who subcontracts the work to a non-MBE/WBE is entitled to credit for the total value of transportation services provided by the non-MBE/WBE subcontractor not to exceed the value of transportation services provided by MBE/WBE-owned trucks on the contract. Additional participation by non-MBE/WBE subcontractors receives credit only for the fee or commission it receives as a result of the subcontract arrangement. The value of services performed under subcontract agreements between the MBE/WBE and the Contractor will not count towards the MBE/WBE contract requirement.
- (6) A MBE/WBE may lease truck(s) from an established equipment leasing business open to the general public. The lease must indicate that the MBE/WBE has exclusive use of and control over the truck. This requirement does not preclude the leased truck from working for others during the term of the lease with the consent of the MBE/WBE, so long as the lease gives the MBE/WBE absolute priority for use of the leased truck. This type of lease may count toward the MBE/WBE's credit as long as the driver is under the MBE/WBE's payroll.
- (7) Subcontracted/leased trucks shall display clearly on the dashboard the name of the MBE/WBE that they are subcontracted/leased to and their own company name if it is not identified on the truck itself. Magnetic door signs are not permitted.

MBE/WBE Replacement

When a Contractor has relied on a commitment to a MBE or WBE firm (or an approved substitute MBE or WBE firm) to meet all or part of a contract goal requirement, the contractor shall not terminate the MBE/WBE for convenience. This includes, but is not limited to, instances in which the Contractor seeks to perform the work of the terminated subcontractor with another MBE/WBE subcontractor, a non-MBE/WBE subcontractor, or with the Contractor's own forces or those of an affiliate. A MBE/WBE may only be terminated after receiving the Engineer's written approval based upon a finding of good cause for the termination.

All requests for replacement of a committed MBE/WBE firm shall be submitted to the Engineer for approval on Form RF-1 (Replacement Request). If the Contractor fails to follow this procedure, the Contractor may be disqualified from further bidding for a period of up to 6 months.

The Contractor shall comply with the following for replacement of a committed MBE/WBE:

(A) Performance Related Replacement

When a committed MBE is terminated for good cause as stated above, an additional MBE that was submitted at the time of bid may be used to fulfill the MBE commitment. The same holds true if a committed WBE is terminated for good cause, an additional WBE that was submitted at the time of bid may be used to fulfill the WBE goal. A good faith effort will only be required for removing a committed MBE/WBE if there were no additional MBEs/WBEs submitted at the time of bid to cover the same amount of work as the MBE/WBE that was terminated.

If a replacement MBE/WBE is not found that can perform at least the same amount of work as the terminated MBE/WBE, the Contractor shall submit a good faith effort documenting the steps taken. Such documentation shall include, but not be limited to, the following:

- (1) Copies of written notification to MBEs/WBEs that their interest is solicited in contracting the work defaulted by the previous MBE/WBE or in subcontracting other items of work in the contract.
- (2) Efforts to negotiate with MBEs/WBEs for specific subbids including, at a minimum:
 - (a) The names, addresses, and telephone numbers of MBEs/WBEs who were contacted.
 - (b) A description of the information provided to MBEs/WBEs regarding the plans and specifications for portions of the work to be performed.
- (3) A list of reasons why MBE/WBE quotes were not accepted.
- (4) Efforts made to assist the MBEs/WBEs contacted, if needed, in obtaining bonding or insurance required by the Contractor.

(B) Decertification Replacement

- (1) When a committed MBE/WBE is decertified by the Department after the SAF (Subcontract Approval Form) has been received by the Department, the Department will not require the Contractor to solicit replacement MBE/WBE participation equal to the remaining work to be performed by the decertified firm. The participation equal to the remaining work performed by the decertified firm will count toward the contract goal requirement.
- (2) When a committed MBE/WBE is decertified prior to the Department receiving the SAF (Subcontract Approval Form) for the named MBE/WBE firm, the Contractor shall take all necessary and reasonable steps to replace the MBE/WBE subcontractor with another similarly certified MBE/WBE subcontractor to perform at least the same amount of work to meet the MBE/WBE goal requirement. If a MBE/WBE firm is not found to do the same amount of work, a good faith effort must be submitted to NCDOT (see A herein for required documentation).

Changes in the Work

When the Engineer makes changes that result in the reduction or elimination of work to be performed by a committed MBE/WBE, the Contractor will not be required to seek additional participation. When the Engineer makes changes that result in additional work to be performed by a MBE/WBE based upon the Contractor's commitment, the MBE/WBE shall participate in additional work to the same extent as the MBE/WBE participated in the original contract work.

When the Engineer makes changes that result in extra work, which has more than a minimal impact on the contract amount, the Contractor shall seek additional participation by MBEs/WBEs unless otherwise approved by the Engineer.

When the Engineer makes changes that result in an alteration of plans or details of construction, and a portion or all of the work had been expected to be performed by a committed MBE/WBE, the Contractor shall seek participation by MBEs/WBEs unless otherwise approved by the Engineer.

When the Contractor requests changes in the work that result in the reduction or elimination of work that the Contractor committed to be performed by a MBE/WBE, the Contractor shall seek additional participation by MBEs/WBEs equal to the reduced MBE/WBE participation caused by the changes.

Reports and Documentation

A SAF (Subcontract Approval Form) shall be submitted for all work which is to be performed by a MBE/WBE subcontractor. The Department reserves the right to require copies of actual subcontract agreements involving MBE/WBE subcontractors.

When using transportation services to meet the contract commitment, the Contractor shall submit a proposed trucking plan in addition to the SAF. The plan shall be submitted prior to beginning construction on the project. The plan shall include the names of all trucking firms proposed for use, their certification type(s), the number of trucks owned by the firm, as well as the individual truck identification numbers, and the line item(s) being performed.

Within 30 calendar days of entering into an agreement with a MBE/WBE for materials, supplies or services, not otherwise documented by the SAF as specified above, the Contractor shall furnish the Engineer a copy of the agreement. The documentation shall also indicate the percentage (60% or 100%) of expenditures claimed for MBE/WBE credit.

Reporting Minority and Women Business Enterprise Participation

The Contractor shall provide the Engineer with an accounting of payments made to all MBE and WBE firms, including material suppliers and contractors at all levels (prime, subcontractor, or second tier subcontractor). This accounting shall be furnished to the Engineer for any given month by the end of the following month. Failure to submit this information accordingly may result in the following action:

- (A) Withholding of money due in the next partial pay estimate; or
- (B) Removal of an approved contractor from the prequalified bidders' list or the removal of other entities from the approved subcontractors list.

While each contractor (prime, subcontractor, 2nd tier subcontractor) is responsible for accurate accounting of payments to MBEs/WBEs, it shall be the prime contractor's responsibility to report all monthly and final payment information in the correct reporting manner.

Failure on the part of the Contractor to submit the required information in the time frame specified may result in the disqualification of that contractor and any affiliate companies from further bidding until the required information is submitted.

Failure on the part of any subcontractor to submit the required information in the time frame specified may result in the disqualification of that contractor and any affiliate companies from being approved for further work on future projects until the required information is submitted.

Contractors reporting transportation services provided by non-MBE/WBE lessees shall evaluate the value of services provided during the month of the reporting period only.

At any time, the Engineer can request written verification of subcontractor payments.

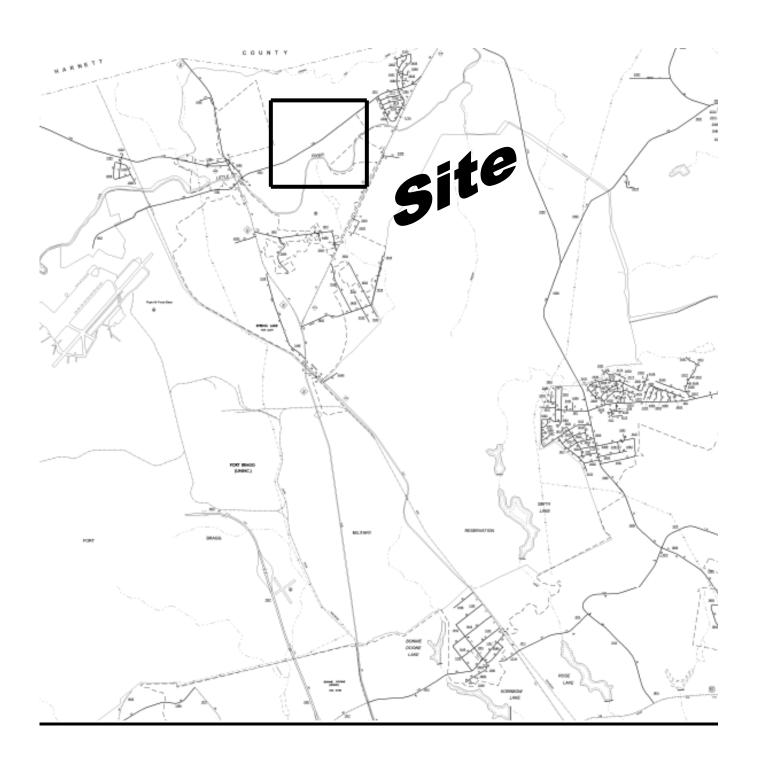
The Contractor shall report the accounting of payments on the Department's DBE-IS (Subcontractor Payment Information) with each invoice. Invoices will not be processed for payment until the DBE-IS is received.

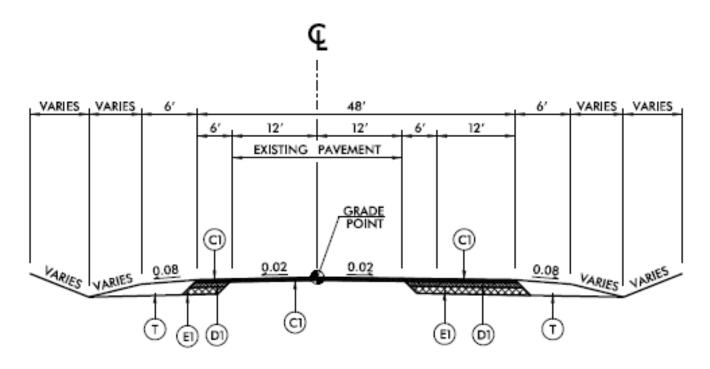
Failure to Meet Contract Requirements

Failure to meet contract requirements in accordance with Subarticle 102-15(J) of the 2012 Standard Specifications may be cause to disqualify the Contractor.

VICINITY MAP

Work Order Number: 30001.92 State Road Number: 1451 (Manchester Road)





TYPICAL SECTION

SR 1451 (Manchester Road) Carvers Creek State Park

(Six foot earthen shoulder with 3:1 front ditch slope desirable)

(Six foot symmetrical widening each side to accommodate left turn lane with twelve foot right turn lane.)

	PAVEMENT SCHEDULE					
C1	PROP. APPROX. 1.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S 9.5 A, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.					
D1	PROP. APPROX. 2.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I 19.0 B, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.					
E1	PROP. APPROX. 3.5" ASPHALT CONCRETE BASE COURSE, TYPE B 25.0 B, AT AN AVERAGE RATE OF 399 LBS, PER SQ, YD,					
Т	SELECT SHOULDER AND SLOPE MATERIAL					

Work Order Number: 30001.9.2 State Road Number: 1451 (Manchester Road)

AWARD LIMITS ON MULTIPLE PROJECTS

It is the desire of the Proposer to be award \$	ded contracts, the value of which will not exceed a total of, for those projects indicated
	the same date as shown in the Proposal Form. Individual project number and county in the appropriate place below.
(Project Number)	(County)
such limit in the space provided above in the lt is agreed that in the event that I am (we value of which is more that the above stipus	are) the successful bidder on indicated projects, the total lated award limits, the Board of Transportation will award ed which have a total value not exceeding the award limit
	**Signature of Authorized Person

^{**}Only those persons authorized to sign bids under the provisions of Article 102-8, Item 7, shall be authorized to sign this form.

EXECUTION OF BID NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION

CORPORATION

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the bidder has not been convicted of violating N.C.G.S. § 133-24 within the last three years, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF CONTRACTOR

Full nam	ne of Corporation
Address	s as prequalified
Attest	Ву
Secretary/Assistant Secretary Select appropriate title	President/Vice President/Assistant Vice President Select appropriate title
Print or type Signer's name	Print or type Signer's name
	CORPORATE SEAL
AFFIDAVIT MU	UST BE NOTARIZED
Subscribed and sworn to before me this the	NOTARY SEAL
day of, 20	
Signature of Notary Public OfCounty	
State of	
My Commission Expires	

PARTNERSHIP

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the bidder has not been convicted of violating *N.C.G.S.* § 133-24 within the last three years, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF CONTRACTOR

Full Name of Partnership

Tail Haille S. Faltilolollip									
Address as Prequalified									
	Ву								
Signature of Witness	_ ,	Signature of Partner							
Print or type Signer's name	_	Print or type Signer's name							
AFFIDAVIT MU	IST BE NO	OTARIZED							
Subscribed and sworn to before me this the									
day of 20		NOTARY SEAL							
Signature of Notary Public									
ofCounty									
State of									
My Commission Expires:									

LIMITED LIABILITY COMPANY

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the bidder has not been convicted of violating *N.C.G.S.* § 133-24 within the last three years, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF CONTRACTOR

	Full Name of Firm	
	Address as Prequalified	
Signature of Witness	Signature of Manager Individually	
Print or type Signer's name	Print or type Signer's I	Name
FFIDAVIT MUST BE NOTARIZED	NOTARY SEAL	
ubscribed and sworn to before me this the	NOTALL SEAL	
	NOTALL SEAL	
day of 20		

My Commission Expires:____

JOINT VENTURE (2) or (3)

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the bidder has not been convicted of violating *N.C.G.S.* § 133-24 within the last three years, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF CONTRACTOR

Instructions: **2 Joint Venturers** Fill in lines (1), (2) and (3) and execute. **3 Joint Venturers** Fill in lines (1), (2), (3) and (4) and execute. On Line (1), fill in the name of the Joint Venture Company. On Line (2), fill in the name of one of the joint venturers and execute below in the appropriate manner. On Line (3), print or type the name of the other joint venturer and execute below in the appropriate manner. On Line (4), fill in the name of the third joint venturer, if applicable and execute below in the appropriate manner.

(1)				
(2)		Name of Joint Venture		
(2)		Name of Contractor		
		Address as prequalified		
	Signature of Witness or Attest	Ву		Signature of Contractor
•	Print or type Signer's name			Print or type Signer's name
	If Corporation, affix Corporate Seal	and		
(3)				
		Name of Contractor		
•		Address as prequalified		
•	Signature of Witness or Attest	Ву		Signature of Contractor
	Print or type Signer's name			Print or type Signer's name
	If Corporation, affix Corporate Seal	and		
(4)				
	ı	Name of Contractor (for 3 Joint Ve	nture only)	
•		Address as prequalified		
	Signature of Witness or Attest	Ву		Signature of Contractor
•	Print or type Signer's name			Print or type Signer's name
	If Corporation, affix Corporate Seal			
ARY SEAL		NOTARY SEAL		NOTARY
	pe notarized for Line (2)	Affidavit must be notarized for Line		Affidavit must be notarized for Line (4)
	d sworn to before me this 20	Subscribed and sworn to before meday of		Subscribed and sworn to before me thisday of 20
	otary Public	Signature of Notary Public		Signature of Notary Public
	County	of State of	County	ofCou State of
	n Expires:	My Commission Expires:		My Commission Expires:
011111110	II LAPITES	iviy Collillission Expires		iviy Commission Expires

INDIVIDUAL DOING BUSINESS UNDER A FIRM NAME

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the bidder has not been convicted of violating *N.C.G.S.* § 133-24 within the last three years, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF CONTRACTOR Name of Contractor Individual name Trading and doing business as Full name of Firm Address as Prequalified Signature of Witness Signature of Contractor, Individually Print or type Signer's name Print or type Signer's name AFFIDAVIT MUST BE NOTARIZED Subscribed and sworn to before me this the **NOTARY SEAL** day of 20. Signature of Notary Public of County State of _____

My Commission Expires:

INDIVIDUAL DOING BUSINESS IN HIS OWN NAME

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the bidder has not been convicted of violating N.C.G.S. § 133-24 within the last three years, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF CONTRACTOR Name of Contractor Print or type Individual name Address as Prequalified Signature of Contractor, Individually Print or type Signer's Name Signature of Witness Print or type Signer's name AFFIDAVIT MUST BE NOTARIZED Subscribed and sworn to before me this the **NOTARY SEAL** Signature of Notary Public of _____County State of

My Commission Expires:

DEBARMENT CERTIFICATION

Conditions for certification:

- The prequalified bidder shall provide immediate written notice to the Department if at any time the bidder learns that his certification was erroneous when he submitted his debarment certification or explanation that is file with the Department, or has become erroneous because of changed circumstances.
- 2. The terms covered transaction, debarred, suspended, ineligible, lower tier covered transaction, participant, person, primary covered transaction, principal, proposal, and voluntarily excluded, as used in this provision, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. A copy of the Federal Rules requiring this certification and detailing the definitions and coverages may be obtained from the Contract Officer of the Department.
- 3. The prequalified bidder agrees by submitting this form, that he will not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in NCDOT contracts, unless authorized by the Department.
- 4. For Federal Aid projects, the prequalified bidder further agrees that by submitting this form he will include the Federal-Aid Provision titled *Required Contract Provisions Federal-Aid Construction Contract (Form FHWA PR* 1273) provided by the Department, without subsequent modification, in all lower tier covered transactions.
- 5. The prequalified bidder may rely upon a certification of a participant in a lower tier covered transaction that he is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless he knows that the certification is erroneous. The bidder may decide the method and frequency by which he will determine the eligibility of his subcontractors.
- 6. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this provision. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- 7. Except as authorized in paragraph 6 herein, the Department may terminate any contract if the bidder knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available by the Federal Government.

DEBARMENT CERTIFICATION

The prequalified bidder certifies to the best of his knowledge and belief, that he and his principals:

- a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- b. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records; making false statements; or receiving stolen property;
- c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph b. of this certification; and
- d. Have not within a three-year period preceding this proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- e. Will submit a revised Debarment Certification immediately if his status changes and will show in his bid proposal an explanation for the change in status.

If the prequalified bidder cannot certify that he is not debarred, he shall provide an explanation with this submittal. An explanation will not necessarily result in denial of participation in a contract.

Failure to submit a non-collusion affidavit and debarment certification will result in the prequalified bidder's bid being considered non-responsive.

SUBSTITUTE FORM W-9 VENDOR REGISTRATION FORM NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

Pursuant to Internal Revenue Service (IRS) Regulations, vendors must furnish their Taxpayer Identification Number (TIN) to the State. If this number is not provided, you may be subject to a 20% withholding on each payment. To avoid this 20% withholding and to insure that accurate tax information is reported to the Internal Revenue Service and the State, please use this form to provide the requested information exactly as it appears on file with the IRS.

INDIVIDUAL AND SOLE PROPRIETOR: ENTER NAME AS SHOWN ON SOCIAL SECURITY CARD

3.

NAME (Print or Type)		TITLE (Print	or Type)	
			nt other than the certifications required to avoid RS FORM W-9 at http://www.irs.gov/pub/irs-	1
The number shown on this form is my correct I am not subject to backup withholding becau withholding as a result of a failure to report all I am a U.S. person (including a U.S. resident	se: (a) I am exempt interest or dividend alien).	from backup withholding, or (b) is, or (c) the IRS has notified me	have not been notified by the IRS that I am subject to backuthat I am no longer subject to backup withholding, and	
IRS Certification Under penalties of perjury, I certify that:	or to morror, in man	s, in amaio, Disabled Cime		
What is your firm's gender? (□Prefer No	ot to Answer.□ Male	e. □Female) Disabled-Owne	d Business? (□Prefer Not to Answer, □Yes,□ No)	
□Hispanic American, □Asian-Indian A	american, □Ot	her:)	
What is your firm's ethnicity? (☐Prefer No	t To Answer, □Af	rican American, □Native Am	erican, □Caucasian American, □Asian American,	
	purpose is to collec		s doing business with NCDOT. If you choose to participate, ci	
Participation in this section is voluntary. Yo	ou are not required to	o complete this section to becom	e a registered vendor. The information below will in no way aff	fect
CITY, STATE, ZIP:				
COMPLETE THIS SECTION IF PAY REMIT TO ADDRESS: STREET / P		ADE TO AN ADDRESS OT	HER THAN THE ONE LISTED ABOVE:	
FED.EMPLOYER IDENTIFICATION	NO		(Employer Identifi	cation #
SOCIAL SECURITY NO. OR			(Social Security #	ŧ)
	□OTHER / SF	PECIFY		
	□ESTATE/TR	UST (use Federal ID no.)	□STATE OR LOCAL GOVT. (use Federal ID No.)	
		TION (use Federal ID No.)	□PARTNERSHIP (use Federal ID No.)	
DBA / TRADE NAME (IF APPLICAE BUSINESS DESIGNATION	•	□INDIVIDUAL (use	□SOLE PROPRIETER (use SS No. or Fed ID	
CITY, STATE, ZIP:	\ . .			
MAILING ADDRESS: STREET/PO E	BOX:			
NAME:				
CORPORATION OR PARTNERSHIP	: ENTER YOUR	LEGAL BUSINESS NAME		

To avoid payment delays, completed forms should be returned promptly to your local DOT office.

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Rev. 9-27-10

County (ies) Contract Number C

LISTING O FIRM NAME AND ADDRESS	F MBE or WBE	M W M M M M M M M M M M M M M M M M M M	IG OF MBE & WBE SUBCONTRACTORS Sheet or ITEM NO. ITEM DESCRIPTION UPO WBE PI	Sheet * AGREED UPON UNIT PRICE	** DOLLAR VOLUME OF ITEM
Contract No.		County		Firm	
forms were to a constant in a subset of the District to the		100000000000000000000000000000000000000			

This form must be completed in order for the Bid to be considered responsive and be publicly read. Bidders with no MBE and/or WBE participation must so indicate this on the form by entering the word or number zero. MISC3

of	** DOLLAR VOLUME OF ITEM						\$	%	\$	%
JRS Sheet	* AGREED UPON UNIT PRICE						E Subcontractor	ontract Bid Price	E Subcontractor	ontract Bid Price
LISTING OF MBE & WBE SUBCONTRACTORS Sheet	ITEM DESCRIPTION						** Dollar Volume of MBE Subcontractor	MBE Percentage of Total Contract Bid Price	** Dollar Volume of WBE Subcontractor	WBE Percentage of Total Contract Bid Price
& WBE	ITEM NO.							Agreed tor, and	5	
F MB M	MBE or WBE							I be the Actual Price Agreed Jor WBE subcontractor, and properties of the MBE and/or		
O SNILSTING O	FIRM NAME AND ADDRESS							* The Dollar Volume shown in this column shall be the Actual Price Agreed Upon by the Prime Contractor and the MBE and/or WBE subcontractor, and these prices will be used to determine the percentage of the MBE and/or	WBE participation in the contract.	** Must have entry even if figure to be entered is zero.

County (ies)

Contract Number

This form must be completed in order for the Bid to be considered responsive and be publicly read.

Bidders with no MBE and/or WBE participation must so indicate this on the form by entering the word or number zero.

MISC3

Rev 9-27-10

State of North Carolina Department of Transportation Subcontractor Payment Information

	Submit with Invoice To:	District Engine North Carolina Division 6 / Dis P.O. Box 1150 Fayetteville, NO	Department of Tr trict 2	ansportation		
	Firm Invoice No. NC DOT PO / Contract Number WBS No. (State Project Date of Invoice					
Invoice Line Item Reference	Payer Name	Payer Federal Taxld	Subcontractor/ Subconsultant/ Material Supplier Name	Subcontractor/ Subconsultant/ Material Supplier Federal Tax Id	Amount Paid To Subcontractor/ Subconsultant/ Material Supplier This Invoice	Date Paid To Subcontractor/ Subconsultant/ Material This Invoice
lote: These d	ocuments are scanned into the NCDOT I	Fiscal Program. Plea			contractor Firms	\$
	on of Firm this information accurately reflects a ors/ Subconsultants/Material Supp				re made to	
	Signature			Title		
	Print Name			Date		
				'		



North Carolina Department of Transportation DIVISION CONTRACT BID FORM

Work Order Number: 30001.92

State Road Number: 1451 (Manchester Road)
Cumberland County

LINE	ITEM	SECT	DESCRIPTION	QTY	UNIT	UNIT PRICE	AMOUNT BID
10	0000100000-N	SP	Mobilization	1	LS		
30	0063000000-N	SP	Comprehensive Grading	1	LS		
40	0156000000-N	SP	Removal of Existing Asphalt Pavements	25	SY		
50	0372000000-E	SP	18" RC Pipe Culvert, Class III	64	LF		
60	0995000000-E	SP	Pipe Removal	40	LF		
70	122000000-E	SP	Incidental Stone Base	25	Ton		
80	1231000000-E	SP	Shoulder Borrow	230	CY		
90	1308000000-E	SP	Milling Asphalt Paving, 0" to 1.0"	267	SY		
100	1489000000-E	610	ACBC Type B 25.0 B	311	Ton		
110	1498000000-E	610	ACIC Type I 19.0 B	222	Ton		
120	1525000000-E	610	ACSC Type SF 9.5 A	303	Ton		
130	1575000000-E	620	Asphalt Binder, PG 64-22	44	Ton		
140	4685000000-E	1205	Thermoplastic Pavement Marking Line (4" - White - 90 mils)	1900	LF		
150	4686000000-E	1205	Thermoplastic Pavement Marking Line (4" - White - 120 mils)	385	LF		
160	4686000000-E	1205	Thermoplastic Pavement Marking Line (4" - Yellow - 120 mils)	2605	LF		
170	4695000000-E	1205	Thermoplastic Pavement Marking Line (8" - Yellow - 90 mils)	550	LF		
180	4725000000-E	1205	Thermoplastic Pavement Marking Symbol (90 mils)	4	Each		



DIVISION CONTRACT BID FORM (Continued)

LINE	ITEM	SECT	DESCRIPTION	QTY	UNIT	UNIT PRICE	AMOUNT BID
190	490000000-N	1251	Permanent Raised Pavement Markers (Crystal/Red)	15	Each		
200	490000000-N	1251	Permanent Raised Pavement Markers (Yellow/Yellow)	25	Each		
210	608400000-E	1660	Seeding and Mulching (Permanent)	0.50	Acre		

The Contractor shall note that the above mentioned quantities are used <u>only</u> for determining the low responsible bidder.

TOTAL BID FOR WORK ORDER NUMBER 30001.92:

NOTE: Bids are required on all contingent items. Any proposals which do not have a bid for contingent items will be considered non-responsive and will not be considered for award of contract.

CONTINGENT ITEMS

LINE	ITEM	SECT	DESCRIPTION	QTY	UNIT	UNIT PRICE	AMOUNT BID
220	0036000000-E	SP	Undercut Excavation	10	CY		
230	3656000000-E	876	Geotextile for Drainage, Type 2	100	SY		
240	6036000000-E	SP	Matting for Erosion Control (8' Excelsior)	100	SY		
250	6071010000-E	SP	Temporary Excelsior Wattle	100	LF		
260	6071020000-E	SP	Polyacrylamide (PAM)	1	LB		



DIVISION CONTRACT BID FORM (continued)

CONTRACTOR	
ADDRESS	
Federal Identification Number	Contractors License Number
Authorized Agent	Title
Signature	Date
Witness	Title
Signature	Date
	LETED BY NORTH CAROLINA DEPARTMENT OF TRANSPORTATION with Article 103-1 of the Standard Specifications for Roads and Structures 2012.
Reviewed by	's Engineer (date)
Accepted by NCDOT	Engineer(date)
Division .	±g00.